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THE MONTH'S COVER

During a monthly field exercise, SETAF Army Band members leave instruments to go into the field as vehicle drivers and camp guards. Sergeant of the Guard Riley Collins talks with sentries PFC Harold Whittum and PFC John Burroughs. (*Photo by U.S. Army Signal Corps.*)

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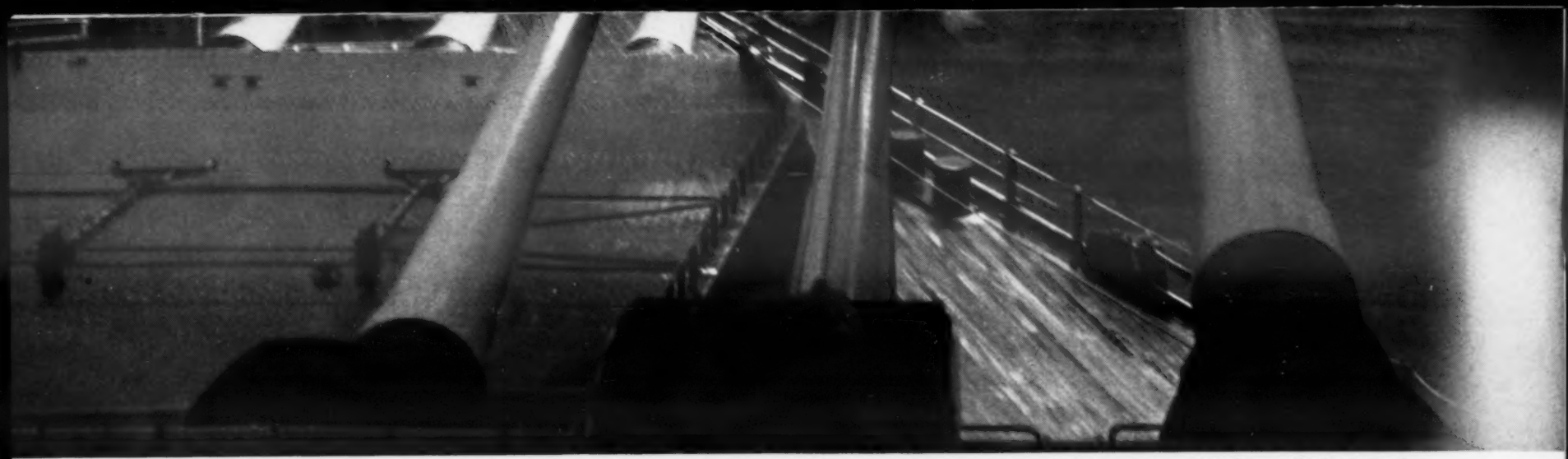

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THE MONTH'S MAIL

Men Make the Regiment

● First, I wish to congratulate you on the April issue, and for restoring the magazine to the standards of the old *Infantry Journal*.

Second, my deep thanks for the article by Colonel Schmierer ["Long Live the *Regiment*"]. He was fortunate enough to be the Indian in a position to do something about the regimental system. For more than twenty years I have been one of the peons who advocated this move. However, it has not gone far enough, and the Colonel's good work will become meaningless unless this very necessary move is carried to its correct and ultimate conclusion. I suggest that within the confines of a given calendar month—not to exceed six months in the near future—all officers, warrant officers, noncommissioned officers and other enlisted ranks of the three combat arms be directed to select their regiment. On that day, make the entry in service records and those in DA, and send the completed roster to the regiment's home depot. Further, direct all these people to wear the trappings of their respective regiments, and for signature blocks in correspondence to show rank, regiment and branch. Officers on staff duty or other assignments to continue wearing their regimentals and to sign their names in a similar manner. When these officers return to troop duty, they will return to a battalion of the regiment by way of its home depot.

Without question this will result in some decentralized and expensive administration, but the end warrants the means. The system as devised by Colonel Schmierer has indeed restored the regimental system to life, by preserving the regiment's history. But the blood of a regiment is the men who live in it. Without this added ingredient the whole scheme will fail. The commanders of an atomic army must have tightly knitted units that can live in isolation and loneliness, and draw their strength to survive and win from their history and the men themselves. This can only be done by linking the past to the future through men and history. Only a battalion of men dedicated to the regiment will cut the mustard on the atomic battlefield. Frankly, the present Army won't hack it. We have forgotten how to stand alone. Only permanent membership in the regiment can give this virtue back to us.

MAJOR HARRY W. MORSE
Baltimore, Md.

Enlist the Master Munchausens

● With all the secret weapons we have, and plans for using the lame, the halt and the blind for ZI duty during total war, there is one class which could be used as perambulating weapons of war: that class known as pathological liars.

In highly authoritarian lands, impersonators and con men are scarce, but when they arise, woe to the bureaucrats! Before World War I, there was a cobbler who upset the town of Köpenick, Germany, by posing as a military inspector. He fired half the town moguls, canned others, and left with the cash while the authorities were too covered with confusion to do much. He had fun while it lasted. In the Paradise of the Toilers and Peasants, there once was a book on the adventures of one Ostap Bender, a con man and slicker who was usually two paces ahead of the local harness bulls. I hear this one is very much out of print in the USSR, but that it was a satire on the deeds of some less than model Soviet citizens who really existed.

We could get people like that man who posed as a medic in the Canadian Navy, and several types of professors, to infiltrate and give the opposition a conniption. Such a lad with a good command of the Russian tongue might be a commissar before they caught him. It might even be sporting to see what the MVD get out of brainwashing him—provided he didn't get them first.

Some of our folk like to wear high-ranking duds. I know one who is the most plausible bull artist in these parts. He favors posing as a Navy or Coast Guard officer and causes people to fall over one another opening doors for him. Some time back he invaded a Navy air station dressed as a Coast Guard captain, and before he was caught he had made several people into suckers. He is a fine offhand spinner of tales, and plausible as they come. Deck him out with a field-grade identity, give him important—but not too important—facts on a couple of real weapons, show him a few "cover" projects and a few facts on incredible weapons of war, and leave him where he would be captured. By the time the foe got through with such a well-documented fake, they wouldn't believe the truth if it sneaked up and bit them.

The use of such self-perpetuating menaces might sound wacky, but once a well-primed halfwit scared the Indian half of a siege force away from Fort Stanwix at a crucial time. If the Russians can arm dogs with contact mines, and the French can mount forward 75mm recoilless rifles on motor scooters, we should make the best of our manure spreaders. During the last big argument we cleaned out the guardhouses and used a lot of unlikely characters to fill out the ranks. The bull artist is of little use for straight duty. Let's use his peculiar talents in the most peculiar ways we can. Then get out from under and listen to the pieces fall.

SGT. VON LACKWITZ

Height of Old Baldy

● In the February issue, page 50, the caption for the picture of Old Baldy further identified it as "Hill 216." I think this height is in error. Although the spot elevation is not given on my sheet 6628 IV, Chorwon, Korea, the hill I knew as Old Baldy in July 1952, at the approximate grid coordinates 256322 was higher than 260 meters, and if memory serves me correctly, the hill was 266 meters high.

CAPT. KENNETH G. HERRING
Fort Benning, Ga.

● *Captain Herring is right. Major C. W. Huff, author of "Observation Plus," says*

READY TO RIDE

Mr. G. I. Epperson of Gaffey Heights, Fort Knox, Ky., uses this personally-designed cachet to express his faith in the eventual return of the hoss cavalry

that somewhere in dictation or in retyping, the figures became transposed from 266 to 216.

Fast Draw Unnecessary

● I agree only in part with what John L. Hofues ["Pistols, Holsters and Cartridges," March] says. True, our present pistol needs some modification, but anyone who was ever armed with it, I'm certain, has never complained about the .45's power.

As for the magazine, in the Marine Corps everyone armed with the pistol has at least two. How long would a pistol remain empty with a fresh magazine ready? With the self-contained magazine, loading a single round might be done faster than a seven-round magazine, but does the average fighter hit his target with the first round?

As for double-action automatics, being quite unfamiliar with this type of weapon I cannot say anything for or against. But to say "Carrying the pistol cocked, even with manual safety locked is an extremely dangerous practice" to a combat soldier is like telling a pedestrian crossing streets is dangerous. Danger is relative, according to the situation, and carrying loaded weapons is dangerous for the soldier.

In combat, life does hinge on seconds or fractions of seconds, but gone are the days (except on TV) of the Old West quick-draw hip-firing. Men armed with the pistol in combat have more important things to do than looking for individual gun fights. If there is danger of being overrun, who in his right mind would leave his pistol in its holster so that he may use his fast draw?

Instead of redesigning all our weapons, let's keep the combat-proven ones and eliminate their bad points. In the pistol, weight and barrel length are considerable drawbacks. Why not make the receiver of aluminum alloy and add an inch to the barrel (the Colt's Commander is of aluminum alloy, but the barrel is shorter)? Whether or not this type of change has been considered is not important. The main thing is to keep some combat-proven weapons.

SSgt. Charles J. Ramsay
USMC
Gary, Ind.

Junior Wants to Rate Seniors

● Recently an unnamed officer wrote to a service newspaper proposing that junior officers rate their seniors as well as being rated by them. The idea reminded me that the same proposal was made by the late Colonel Joseph I. Greene, who was for many years editor of *Infantry Journal* and *Combat Forces Journal*.

The Army once allowed juniors to rate seniors, and if the practice were put into effect again we would have the end result of a more professional officer corps composed entirely of gentlemen.

All interested should support this matter before our service ends up as a do-nothing diplomatic corps.

Captain Infantry

More Power to the NCO

● After reading the letters in "The Month's Mail" commenting on Colonel Collins's article in the January issue, a few points occur to me.

Let's not forget that the noncommissioned officer in combat has to be understanding and fair to his men, and at the same time be able to give orders that he expects to be obeyed. I'll admit that the four noncommissioned officers who had their letters printed have more time in the service than I. Within the regiment the colonel is looked upon by his men as something of a god for whom they have deep respect. His word is law, and he, like his noncommissioned officers, expects to be obeyed.

One sergeant invited us to look at Fort Jackson, Fort Campbell, and Fort Benning. When we do look we find two training camps and one combat division. Then consider the spoiled brat who enters the service, and becomes the noncommissioned officer's boogie man. Mother, wife, sister or sweetheart is always complaining to the CO that the noncommissioned officers got poor Fauntleroy dirty in the mud. He should do something about this because the poor boy is so frail. Yet the guy looks like he could break you in two.

I say give the noncommissioned officer more authority to act in any way he sees fit.

Pfc. John J. Moriarty
Hillside 27, Md.

Treatment Prescribed

● The CONUS disease partially diagnosed by Colonel Collins needs rapid treatment. Perhaps a catharsis is indicated. Cerebrating real hard led to some symptomatic considerations on the consultation chart for Patient U. S. Army, Age 180:

Patient displays no mean articulation, owns the locomotor reflexes necessary to his well-being, illustrates a capacity for overcoming adversity, and has a history of achieving his objective. Possesses all the attributes of a superior specimen but is in a state of psychosis manifested by the following:

There is extreme lack of coordination between head and tail. His superb cranial activity continually produces and processes messages, orders and policies. In the channels of his nervous system (for some strange reason) the transmissions are implemented and augmented rather than modified and clarified. Hence, the desired result—that of wagging the tail—is not accomplished. Resulting paralysis is accompanied by the introduction and even production of parasites prejudicial to the entire structure. The parasites tend to de-

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part the tail within six months to two years, leaving behind considerable degenerated tissue. The tail will continue idle, with a dubious future unless extreme measures are taken. It is directed that the following regimen be rigidly enforced:

(1) Cranial activity will be limited to professional soldiering vs. great machinations and staff injunctions.

(2) Nervous system channels will be excised of all implementing and augmenting membranes. Tissue transplant to tail where there is crying need, is desirable.

(3) Application of a germicide to the tail is indicated. This will eliminate or localize parasites. Select spores should be utilized as antibodies.

Recovered patient will prove ready for any emergency.

MSgt. Hans R. Hauke
11th Battalion
Fort Eustis, Va.

Problems of Reserve Districts

● As chief of a USAR military district, two articles in the January issue interest me a great deal.

Generally, I should like to subscribe wholeheartedly to the substance of "What Are We Doing to Our Commanders?" as it applies to the active establishment and more specifically as it is compounded in the reserve forces. Specifically, the article is most apropos in these respects:

"Statistics run riot, and quotas pile on quotas." This is particularly true as regards quotas for enlistments in the Reserve. Too often, in order to fill a quota, quantity pushes quality into the background.

"Overwhelmed by paper and bound in an administrative straitjacket." Even though civilian administrative assistants have been authorized for Reserve unit commanders, the administration of the unit consumes far too much of the commander's time. Presently these assistants are insufficient in number, and the "armchair" and "alibi" reports far too numerous. The quoted terms are used in Operation Paper Chase.

"Training schedule of plus 365 days a year." The points covered here are especially true of the Reserve program, and are amplified when you consider that Reserve units put in forty-eight two-hour drills per year plus two weeks of annual unit training; an equivalent of approximately four and a half weeks of full-time training a year. While improvements are being made in training facilities and the issue of equipment, much has yet to be done in these fields for the Reserve to get the most effective training.

While I read two prior articles on the Command Management System by Colonel Kowalski and considered that they had merit, I believe that "New Methods of Management" falls into the category of "alibi" or "command chair" reporting. As for the subhead "How to win subordinates and influence opinions," I have not resisted the Command Management System because theoretically I believe it has merit. However, I have, prior to the written directive from higher headquarters, resisted its implementation in the military district and, as Colonel Kowalski acknowledged, I "may be right in opposing the change." Presently my military district is implementing a command management system as defined for a post, camp or station. The management of a military district is not comparable to that of a post, camp or station for many reasons. The foremost is that there are many intangibles in its operation for which there is no common yardstick as pertains to dollar values. In my opinion, before imposing the Command Management System upon the military district and the Reserve program, the test given it should have been more conclusive as to end results and benefits to be expected. Presently it is not realistic, and is requiring efforts, without added personnel for the purpose, which detract from the Reserve program.

I write this in the interest of the Reserve program and to plead to those interested in these matters to extend their efforts to the Reserve program as a vital part of our defense structure.

Col. J. G. Reynolds
New Orleans, La.

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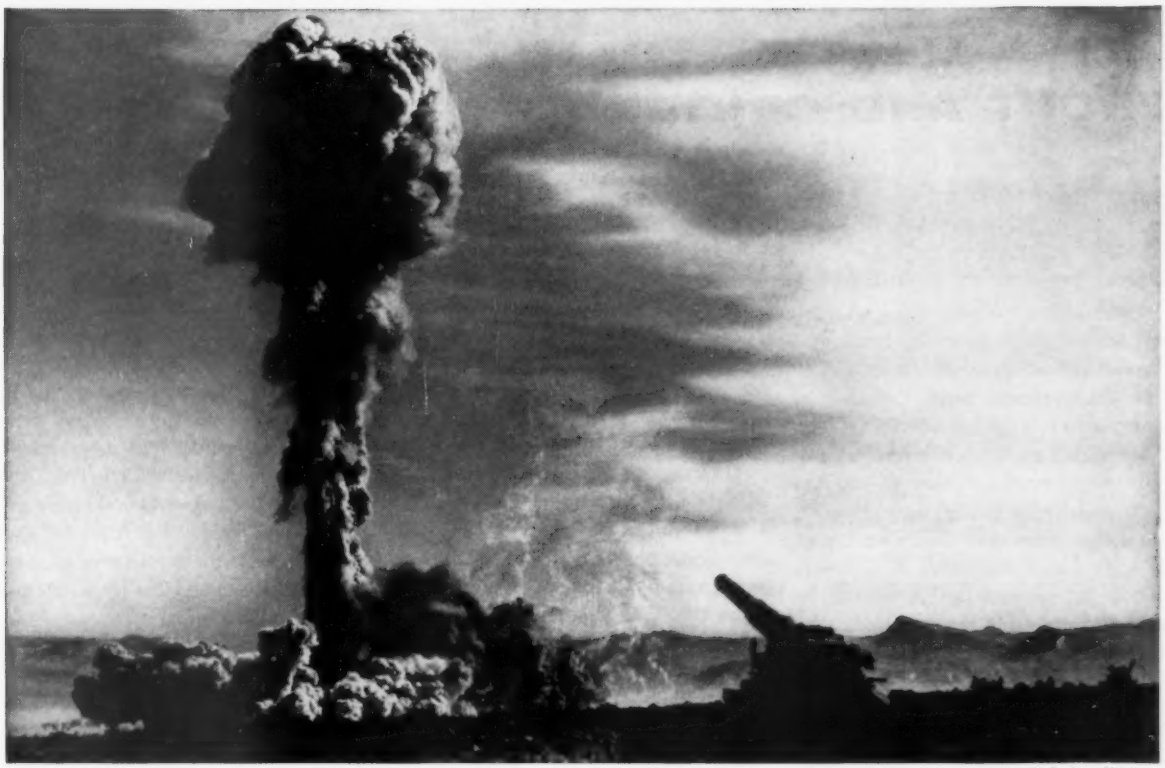

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This is one of a series of ads on the technical activities of the Department of Defense.

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Officer Enlistments Restricted

Officers now on active duty who are relieved after 30 June will not be allowed automatically to enlist in grades E-6 or E-7. Under present policy, officers separated under honorable conditions who enlist within ninety days receive an initial appointment in either of the top two grades, the rating depending on whether commissioned service was before or after 22 March 1948. As a consequence, many vacancies that could be used for promoting career enlisted men to E-6 and E-7 have been reserved for former officers. Under the new policy, after 1 July DA will determine the grade of former officers who enlist, based on qualifications to meet requirements. However, because of the limited number of vacancies, few appointments are expected to be made above E-5.

After 30 June, an officer or warrant officer relieved either voluntarily or involuntarily from active duty may apply no earlier than 120 days before release for a grade determination if he decides to enlist. Applications must go through channels on DA Form 1696-R, final determination of grade to be made by TAG. Enlistment must occur within ninety days after release to receive the grade.

The new policy will not affect officers who hold permanent enlisted grade. An enlisted man who gave up an E-7 to accept a commission may revert to his former grade when relieved from temporary officer status.

Recruits to Train at Gordon

Active Army recruits will start training at Fort Gordon, Ga., in May to ease the burden on other training establishments.

Over the past three months some 7,000 reservists have come into the six-month training program, including 3,900 in February.

This heavy influx of young men at Fort Dix, N. J.; Fort Knox, Ky.; Fort Jackson, S. C.; Fort Leonard Wood, Mo.; Fort Chaffee, Ark.; and Fort Ord, Calif., created the need for another training site.

Reserve Obligation Reduced

The revamped reserve component enlistment program which went into effect 1 April cuts ready reserve obligations from seven and one-half to three years in the six month training program for 17 to 18½-year olds.

National Guard 17 to 18½-year old enlistees will take only 11 weeks active duty training until 1 Oct., and then participate in a ready reserve unit until they are 28. After the cut-off date, obligated time will be the same as for the Army reserve.

Fewer Wrongdoers

An Army-wide decline in population at disciplinary barracks—a drop from 6,910 in March, 1955, to 4,113 in March, 1957—has made possible the closing of the Fort Gordon DB as of 30 June.

Monitor Pay Legislation

A "task force" to monitor new pay legislation to be introduced in Congress has been formed by the Defense Department. Headed by Major General Harold R. Maddux, USAF, it will be known as the "Task Force on Modernization of Military Compensation."

The pay bills, now being drafted by the task force, will be shaped from changes recommended in the Cordiner Committee's final report. The task force will coordinate and develop statistics and data to present at hearings on the proposed pay scales. It is composed of some thirty military and civilian legislative and actuarial experts.

Cordiner Effects Savings

The chairman of the Cordiner Committee says that legislation to pay servicemen what they are "actually worth" can cut $5 billion from the military budget by 1962. Mr. Ralph J. Cordiner said that at present costs, the legislation also could increase the effectiveness of the services by about 15 per cent. His committee does not suggest a general pay raise, but recommends that the services abolish the longevity system and "pay people what their services are actually worth."

Mr. Cordiner said this would require an investment of only about $300 million for two years; and then the net gains would begin to offset the costs, and by 1962 would amount to $367 million. The cost for FY 1958 can be absorbed in the present service budgets.

New Doctors Draft Law Sought

Legislation authorizing President Eisenhower to issue special draft calls to doctors and dentists under 35 who have been given draft deferments has been requested of Congress.

Primarily affecting dental and medical school graduates who have not met their military obligations, the legislation would amend the Universal Military Training Act instead of continuing the Special Doctors Draft Law, which expires 1 July.

Those called to active duty under the proposed bill would receive the addition-

DUTY

It's the duty of qualified enlisted men to seek commissions, retired Lt. Gen. Reuben E. Jenkins told an Infantry School OCS Class.

"I will not congratulate capable men for accepting this greater responsibility . . . that is your duty," he said.

He urged the graduates to treat subordinates with consideration.

"Never a day passes that a leader doesn't learn something from his subordinates. You owe obedience, intense loyalty, respect and results to your superiors: everything else you owe to your subordinates."

Shifts in the High Command Scheduled for 1 July

GEN. W. B. PALMER
to be Dep. C-in-C,
US EUCOM

GEN. L. L. LEMNITZER
to be Vice Chief of Staff
U. S. Army

GEN. GEORGE H. DECKER
to be C-in-C UNC, Korea;
CG U. S. Forces, Korea;
and CG, Eighth Army

GEN. I. D. WHITE
to be C-in-C
USA Pacific

al $100 a month now paid medical officers.

Largest Intern Training Groups

Army hospitals in this country and overseas will welcome 164 graduates from 71 approved medical schools as interns for the year beginning 1 July. The interns represent all sections of the United States and were selected by the Army Medical Service in participation with the sixth National Intern Matching Program.

This is the largest number of medical interns to be admitted at one time by the Army Medical Service since the establishment of such training. They will be commissioned first lieutenants in the AMC upon entering the service, and at the close of the one year internship will become captains if they remain in the service. Among those selected are 118 participants in the Army Medical Service Senior Student program.

The increase for 1957 is accounted for by the extension of intern training to the U. S. Army Hospital at Fort Benning, Ga. It is planned to expand further these openings during the next few years through the addition of more hospitals to the program.

Other hospitals presently participating are: Walter Reed Army Hospital, Washington, D. C.; Letterman Army Hospital, San Francisco, Calif.; Fitzsimons Army Hospital, Denver, Colo.; Madigan Army Hospital, Tacoma Wash.; William Beaumont Army Hospital, El Paso, Texas; Valley Forge Army Hospital, Phoenixville, Pa.; Brooke Army Hospital, Fort Sam Houston, Texas; and Tripler Army Hospital, Honolulu, Hawaii.

EM Proficiency Tests

The Army soon will begin a testing program for determining individual MOS proficiency in enlisted grades. These tests, the results of which will be used in making promotions, reductions, reclassifications, and selections for special training, will be mandatory in some situations, voluntary in others, depending upon their purpose. Actual job performance may be required in addition to the written phases in certain tests. MOS qualifications of noncommissioned officers also will include assessment of leadership ability.

Capehart Suspension Lifted

The temporary suspension of contract negotiations for Capehart family housing at Stateside installations has been lifted. The order suspending contracts, issued 28 February 1957, was designed to slow down Government housing contracts until priorities could be determined. The priorities, when established, will apply only to Capehart projects financed with federal funds, and will not affect military housing being built with private capital.

The slow-down was ordered because of difficulties encountered in attracting long-range private investment capital in the present "tight" mortgage market. Mortgages on Capehart projects, which are assumed by the services and paid from the quarters allowances of military families that occupy the homes, bear four per cent interest and have attracted few investors.

As of 15 March 1957 the Department of Defense had approved 92,226 Capehart units costing $1.4 billion. Of these, 11,284 are being constructed at a cost of some $161 million. With only $200 million in Government funds now available to finance Capehart family housing projects, the money would have been exhausted by the end of March at the then current rate of commitment, had not the temporary suspension been ordered. Defense officials requested Congress to provide an additional $100 million in these funds.

USARADCOM

The Army Antiaircraft Command (ARAACOM) is now called the U. S. Army Air Defense Command (USARADCOM).

With improved NIKE systems for defense against enemy missiles and enemy aircraft gradually replacing conventional antiaircraft artillery, the new name is considered by the Army to be more descriptive of its operational mission in the air defense field.

Commanded by Lt. Gen. Stanley R. Mickelsen, USARADCOM has its headquarters at Ent Air Force Base, Colorado Springs, Colo., and is organized into five regional commands covering the United States. It is the Army component of the Continental Air Defense Command (CONAD), which also includes Air Force and Navy forces.

16th AAA Bn Scoops Field

The 16th AAA Gun Battalion (90-mm), with Headquarters at Fort Banks, Mass., set a hot pace in 1956. Its four firing batteries surpassed all existing records for antiaircraft firing and gun emplacement during Annual Service Practices held at Camp Wellfleet on Cape Cod and placed first, second, third and fourth among 144 competing batteries within the USARADCOM. It also had the highest battalion average within the command.

After taking the top four spots in Annual Service Practices, the 16th scored better than all other gun battalions in USARADCOM in the Army Training Tests with a battalion average of 98.87. Battery B, stationed at Fort Dawes, Mass., achieved the highest battery score with an almost perfect 99.70.

In addition, the 16th had the highest battalion composite score, 98.50, 4½ points better than the USARADCOM average.

Thus the 16th Gun Battalion managed a clean sweep of the six firing categories, both battalion and battery, in the 1956 Annual Service Practices and Army Training Tests. Its commander is Major Vincent J. McManus.

Major General Raleigh R. Hendrix, deputy commander of USARADCOM, presented awards to the battalion, including a trophy cup as winner of the first annual competitive firing by gun units of the U. S. Army Air Defense Command during a review.

Nike Sites to Handle Hercules

Modification of Nike centers to accommodate the larger Hercules missile has begun. The conversion, requiring special electronic installation and other equipment to meet "security and surveillance requirements unique to handling" nuclear explosives, is expected to be completed in about nine months after designs are approved. Preparation of the sites, which will average about fifty acres, will cost between $200,000 and $350,000 each.

The 39-foot Hercules, which can carry either a TNT or a nuclear warhead, is about ten feet longer and five times heavier than the Ajax, and has considerably more range.

Nike Firing Competition

The 28th AAA Bn of Seattle, Wash., outscored all other NIKE units to win the first organized firing competition ever held between guided missile teams.

The 28th beat out nearly 40 other battalions of USARADCOM.

Carried out at the Army's Red Canyon Range in New Mexico, the 28th amassed 9,400 points out of a possible 12,000, bagging 10 of 12 targets.

Scoring was judged on battery assembly, fire control operations, launching area procedures, firing and timing.

Other standout units included the 602d of the Washington-Baltimore Defense system and the 24th of Ft. Banks, Mass.

Army Missile Commands

Soon after the Army changed the name of the new Atomic Support Commands to Army Missile Commands it announced a new one had been formed at Fort Bragg.

Core of the unit is the 250th Rocket Battalion, armed with 762mm Honest John rockets. The command is organized as a self-sufficient fighting force, with signal, rifle, headquarters, service, and combat engineer companies. Engineer survey, camouflage and water purification units are scheduled to become active with the command. Rapid movement by air is a key principle of the command.

A unit designated Medium Missile Command has also been formed at Fort Hood, Texas.

Two More Pentomic Divisions

The 4th Armored Division at Fort Hood, Tex., and the 4th Infantry Division at Fort Lewis, Wash., are to reorganize as Pentomic divisions this year. Besides the 101st Airborne, the other divisions which started regrouping earlier this year are the 25th Infantry, the 1st Armored, the 1st Infantry, and the 11th Airborne.

Within the next two years the Army expects all its infantry, armored and airborne divisions to be tailored to the Pentomic concept of five self-contained units with tremendous fire power and high battlefield mobility.

The Pentomic infantry division has 13,748 men, the airborne, 11,486, and the armored, 14,617.

The principles on which the new divisional organization has been developed are these:

¶ Ready adaptability of units to requirements of the atomic battlefield.

¶ Pooling at higher echelon of elements not habitually required in the Division. Such pooling effects economy of equipment which is required only intermittently in the division, and at the same time keeps the division "lean." This new division will have with it organically only those elements needed in any area in which it may be required to fight.

¶ Recognition of the increased span of control possible through improved signal communications. Modern signal equipment permits a commander to control a larger number of subordinate units than has hitherto been possible. It has become apparent that a large unit such as a division can directly control more than the conventional three major tactical units. Accordingly, in reorganizing the Infantry and Airborne Division, five battle groups will be brought under division control.

¶ Adaptability to the integration of new and better equipment as it is developed. The capability of absorbing new weap-

BRACKETING THE TARGET

This, the fiftieth anniversary of U. S. military aviation, is going to be marked with a number of observances and ceremonies. A bill has been introduced in Congress, for instance, to provide for a marker to be placed at Fort Myer, Va., to commemorate the first flight of an airplane on an Army installation.

The 82d Airborne Division is going to get a new ultra-modern noncommissioned officers' club which will include a swimming pool and in time a 35-unit motel. A loan of $500,000 has been approved for the project.

The first issue of *Airman*, the new official USAF magazine for enlisted ranks, is expected to appear late in June. The staff has been assembled in the Pentagon for several months, but ran into budgetary difficulties. First printing is on the basis of one copy for each ten airmen.

The Army Signal Corps finally disposed of most of its remaining pigeons by selling 1,018 of them to 82 pigeon fanciers at the rate of $5 per pair.

The RAF is going to turn over all responsibility for aircraft up to a maximum of 4,000 lbs., to the British Army. This includes both rotary and fixed-wing aircraft.

1957 REUNIONS

1st Armored Division. 23-24 Aug. Bellevue-Stratford Hotel, Philadelphia, Pa. Write Col. Leo B. Conner, 1529 18th St., NW, Washington 6, D. C.

1st Infantry Division. 23-25 Aug. Sheraton-Park Hotel, Washington, D.C. Write Arthur L. Chaitt, 5309 Germantown Ave., Philadelphia 44, Pa.

2d Armored Division. 2-4 Aug. Benj. Franklin Hotel, Philadelphia. Write R. F. Perry, PO Box 172, Alexandria, Va.

3d Armored Division. July. Write Paul W. Corrigan, 80 Federal St., Boston 10, Mass.

3d Infantry Division. 11-13 July. Claypool Hotel, Indianapolis, Ind. Write Harry Cedar, 1129 Warner Bldg., Washington 4, D. C.

4th Infantry Division. 8-10 Aug. Shoreham Hotel, Washington, D. C. Write Joseph Summa, 132 Avenue V, Brooklyn 23, N. Y.

5th Armored Division. 8-10 Aug. Manger Hotel, Cleveland. Write Lawrence Sawchak, 6308 Ackley Road, Parma 29, Ohio.

5th Infantry Division. 31 Aug.-2 Sept. Hilton Hotel, Chicago. Write Lloyd A. Rader, 451 E. Clay Ave., Roselle Park, N. J.

6th Armored Division. 29-31 Aug. Hotel Statler, Cleveland, Ohio. Write Martin J. Lawlor, 2150 Raymond Ave., Latrobe, Pa.

6th Infantry Division. 6-8 Aug. Penn Sheraton Hotel, Pittsburgh. Write James E. Wittstruck, 4201 B St., Lincoln, Neb.

9th Infantry Division. 4-6 July. Hotel Statler, Boston. Write Stanley Cohen, PO Box 66, Livingston, N. J.

10th Armored Division. 31 Aug.-2 Sept. Commodore Perry Hotel, Toledo, Ohio. Write R. L. Bollinger, Pioneer, Ohio.

12th Armored Division. Aug. Write LeRoy W. Bensel, 2557 Main St., Lawrenceville, N. J.

17th Airborne Division. 9-11 Aug. Hotel Statler, Buffalo. Write W. A. Roncone, 802 Hiland Ave., Coraopolis, Pa.

25th Infantry Division. 19-21 July. Hotel Statler, NYC. Write Thomas J. Badger, PO Box 101, Arlington 1, Va.

27th Infantry Division. Sept. Write Lawrence Reagan, PO Box 1403, Albany 1, N. Y.

30th Infantry Division. July. Write Major Saul Solow, 42 Parkway Drive, Hicksville, N. Y.

76th Infantry Division. June. Write Maj. Gen. Henry C. Evans, 6 S. Calvert St., Baltimore 2, Md.

80th Infantry Division. Aug. Write Charles Gainer, Hotel Yorktowne, York, Pa.

83d Infantry Division. 15-17 Aug. Hotel Roosevelt, NYC. Write Col. Robert H. York, Tactical Dept., TIS, Fort Benning, Ga.

88th Infantry Division. 15-18 Aug. Hotel Benj. Franklin, Philadelphia. Write Tony Mildner, 2443 S. Woodstock St., Philadelphia 45, Pa.

94th Infantry Division. 18-21 July. Hotel New Yorker, NYC. Write A. E. Rodriguez, 614 Oakdale Ave., Chicago 14, Ill.

99th Infantry Division. 19-21 July. Lord Baltimore Hotel, Baltimore. Write Dale Warren, Eagle Hill Road, Box 164, RD 7, Pasadena, Md.

101st Airborne Division. 30-31 Aug. Penn-Sheraton Hotel, Pittsburgh, Pa. Write Col. Leo B. Conner, 1529 18th St. NW, Washington 6, D. C.

106th Infantry Division. 25-27 July. General Oglethorpe Hotel, Savannah, Ga. Write James E. Wells, Hepzibah, Ga.

ons and equipment into the new Army divisions has been developed in their structure. The increasing availability of atomic weapons in a wide range of sizes and yields will afford the Army the vital capability of applying firepower when and where needed.

R & D Study

Research and development needs of the Army will be studied for nine weeks at Damariscotta, Maine, this summer by scientists and military personnel under the leadership of Dr. Ellis A. Johnson, director of the Operations Research Office of The Johns Hopkins University. The agenda will include the effect of atomic weapons on tactics and supply, the tactical refinements required for most effective use of atomic weapons, and many problems of mobility, communications and command associated with atomic land warfare. These considerations will be applied to the requirements of both general and limited wars.

Eighteen ORO scientists and some 14 Army officers are expected to take part in this year's meeting, which will continue from 1 July to 31 August.

Similar meetings have been held since the summer of 1952.

TIS Departments Redesignated

The Automotive Department at the USA Infantry School has been redesignated "Ground Mobility Department." To go along with the new designation, The Infantry School has instituted changes in instruction that will emphasize the training of leaders in ground mobility.

Editorial and Pictorial Office is the new name of the Publications and Visual Aids Office. Subsections also have new designations: the Training Literature Section is now the Training Literature Editing Section; the Visual Aids Section has become the Art and Film Section; the Quarterly Section is now known as the Special Editing and *Quarterly* Section; and the Publications Section has been redesignated Mailing List and Printing Liaison Section. The new Army Training Program Development Section is charged with the development and preparation of those ATPs, Army Training Tests and Subject Schedules for which the School has primary responsibility.

General Officer Shifts

Maj. Gen. Paul D. Adams to USAREUR . . . **Maj. Gen. Victor A. Conrad** to SHAPE . . . **Maj. Gen. Garrison B. Coverdale** to National Security Agency . . . **Maj. Gen. John A. Dabney** to USCONARC . . . **Maj. Gen. Lawrence R. Dewey** to EUCOM . . . **Maj. Gen. Harry W. Johnson** to USA Military District, Alabama . . . **Maj. Gen. Willard K. Liebel** to Fourth U. S. Army . . . **Maj. Gen. George O. N. Lodoen** to OJCS . . . **Maj. Gen. Stanhope B. Mason,** to C/S, USCONARC . . . **Maj. Gen. Armistead D. Mead** to Chief, JAMMAT . . . **Maj. Gen. Rinaldo Van Brunt** to Second U. S. Army . . . **Maj. Gen. Ralph W. Zwicker** to 24th Infantry Division . . . **Brig. Gen. James H. Cash** to MAAG, Japan . . . **Brig. Gen. John J. Davis** to OACSI . . . **Brig. Gen. James P. Hannigan** to USAFFE . . . **Brig. Gen. Edwin S. Hartshorn, Jr.,** to Chief, MAAG, Cambodia . . . **Brig. Gen. Walter M. Johnson** to Fort Lewis, Wash. . . . **Brig. Gen. Stanley R. Larsen** to USA Infantry School . . . **Brig. Gen. John E. Leary** to 3d Infantry Division . . . **Brig. Gen. Don Longfellow** to OACS . . . **Brig. Gen. Marion W. Schewe** to USAFFE . . . **Brig. Gen. John C. Steele** to 56th AAA Brigade . . . **Brig. Gen. Charles H. Swartz** to Fifth U. S. Army . . . **Brig. Gen. William F. Train** to USAREUR . . . **Brig. Gen. Francis F. Uhrhane** to USCONAD . . . **Brig. Gen. Walter B. Yeager** to USAREUR . . . **Brig. Gen. Frederick R. Zierath** to USACGSC.

Retirements

Maj. Gen. Riley F. Ennis . . . Maj. Gen. Kester L. Hastings.

THE ARMY'S MONTH

ANOTHER 'NEW LOOK'

IN commenting on the new British military policy, President Eisenhower said the British announcement was similar to what his administration had done in 1953 with its "New Look." The similarities are striking indeed—even Mr. Dulles's threat of "massive retaliation" is paralleled by a less explosive statement to the same effect.

Long-range British plans look to a reduction of over-all military manpower from the present 690,000 "adult males in uniform" to about 375,000 by 1962 and an end to the draft in 1960.

The White Paper said that the strength of the British Army of the Rhine will be reduced from 77,000 to 64,000 men in the next twelve months and that British air forces in Germany would be reduced about one-half in the same period. Other reductions will take place in outlying parts of the Empire and Commonwealth, including the withdrawal of the UK battalion now in Korea.

Greater reliance is to be placed upon nuclear weapons and missiles, although a "central reserve" of Army forces is to be maintained in the British Isles with a "substantial fleet of transport aircraft being built up" to give it strategic mobility.

It has long been apparent that the British were overextended, considering the economic and manpower difficulties facing them. But now that they have faced up to it, their "New Look" raises disturbing questions. Its effect on the United States and the possibility that we will have to take on additional worldwide responsibilities is paralleled by the problems that confront other Western European nations.

THAT a new yeast is at work in Europe is perfectly clear; however, the direction it will take is anything but clear. French forces committed to NATO have been subject to constant attrition because of French troubles in Indochina and North Africa. The British White Paper plainly heads Britain in the direction of defending Western Europe from positions well withdrawn from the Iron Curtain. On the other hand, influential Germans are advocating plans designed to stop Soviet aggression as far forward as possible. Whereas the British are counting on the deterrent effect of long- and intermediate-range missiles, the German Federal Republic seems intent upon obtaining tactical atomic weapons and battlefield missiles and rockets.

The ferment in Germany is most evident in the person of Herr Franz-Josef Strauss, the new Defense Minister of the Bonn Republic. Among the candid comments of this vigorous and purposeful personality is one he reportedly made at the meeting of NATO defense ministers last fall to the effect that he did not intend to provide German "footsloggers for the American atomic cavalry."

In addition to the planned German Army of twelve divisions which will be ticketed to NATO, Herr Strauss is advocating the creation of a Home Guard of some forty or fifty thousand on active duty at all times. This force would, among other things, be responsible for the static defense of the Federal Republic's eastern border. It would be armed and trained to fight tanks. In an article in *The Reporter,* Edmond Taylor quotes Herr Strauss as saying that the aim of this force is "to stop the Russians as far forward as possible."

This idea is almost novel in this day and age. Few persons have thought that Europe could be defended successfully east of the Rhine. If the Germans can make a convincing case for the concept of close-up defense by determined men armed with the most advanced weapons the new technology offers, all of Western Europe would breathe easier, since there is no hope at all if deterrence through the threat of fast, overwhelming nuclear retaliation fails.

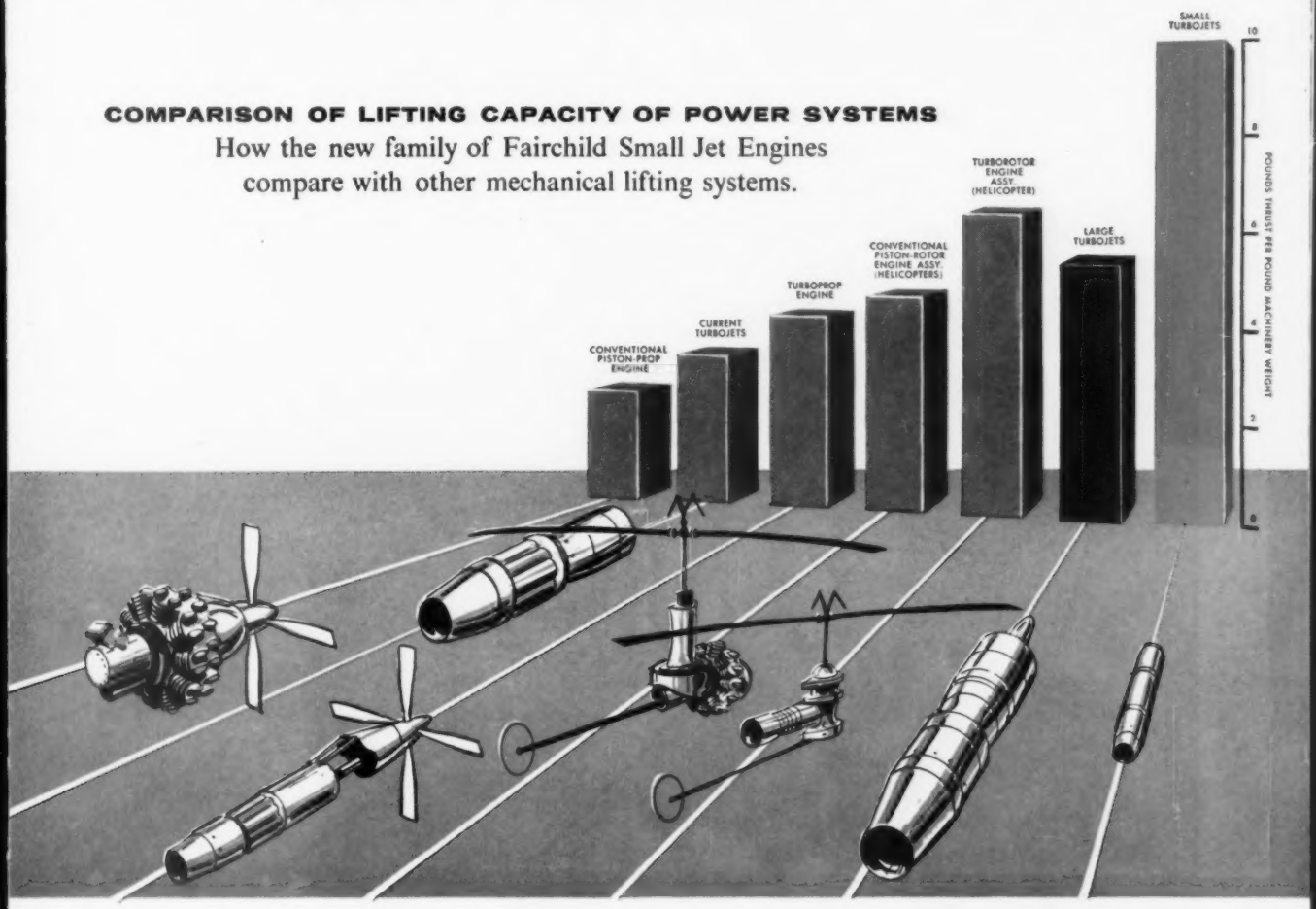
If the Germans can convince their NATO partners that a close-up defense is feasible (and Mr. Taylor says that Herr Strauss believes he can), instead of hoping for a day when U. S. divisions can be brought back from Europe, U. S. military policy may instead require means of beefing them up—beyond the obvious one of providing missiles and missile warheads to our NATO allies.

The British by force of circumstance have been forced to reduce their military commitments. Heavy though U. S. commitments are, we are under no such straitened circumstance, and the deterrent effect of powerfully armed NATO armies determined and able to stop Soviet aggression before it started would be cheap at almost any price.

SMALL JET ENGINES... CHAMPION WEIGHT LIFTERS

COMPARISON OF LIFTING CAPACITY OF POWER SYSTEMS

How the new family of Fairchild Small Jet Engines compare with other mechanical lifting systems.



An entirely new family of aircraft will evolve from a new family of small lightweight jet engines now under development at the Fairchild Engine Division. These new powerplants will feature incredibly high thrusts and great lifting power . . . yet will be so light they can easily be carried by two men.

Highly compact, with low frontal areas, the small jet engines will deliver thrust/weight ratios starting at 8 to 1 with a long range potential of more than 10 to 1. They will be used in the high performance, lightweight trainers, interceptors, target drones, pilotless aircraft including missiles and intermediate class passenger and cargo jets of the nineteen sixties. They will also be used to power fighters and utility cargo craft, executive aircraft . . . and will make jet Short Take Off and Landing (STOL) and Vertical Take Off and Landing (VTOL) aircraft practical.

The small jet engine may be used singly, in pairs and in clusters. It provides multi-engine reliability in aircraft of a size now wholly dependent on a single engine. The small jet engine will produce greater versatility and utility in airplanes of tomorrow.

The extensive research facilities at Fairchild Engine Division have been designed solely to test performance of the small jet engine. They range from full scale, high altitude test chambers to supersonic research for component design. Fairchild Engine Division has spent a decade in the design, development and production of small, powerful jet engines.

FAIRCHILD
ENGINE DIVISION
DEER PARK, LONG ISLAND, N. Y.
A DIVISION OF FAIRCHILD ENGINE AND AIRPLANE CORPORATION

...WHERE THE FUTURE IS MEASURED IN LIGHT-YEARS!

THIS IS

OUR ARMY LIFE

"There is a military way and a militaristic way and the distinction between them is fundamental and fateful," Dr. Alfred Vagts wrote in his *A History of Militarism*. The "military way"—the way to efficiency and victory in war—the U.S. Army understands very well. The "militaristic way"—feudal autocracy that grew into the concept of the nation existing for its army—and the obscenities of Nazi Germany, American soldiers can hardly comprehend. That this can be said with certainty after more than a decade and a half of heavy military commitments and staggering military budgets speaks well for the basic democratic Americanism of the professional soldier, sailor and airman.

That the American professional soldier accepts and cherishes the distinction between a military army and a militaristic one and makes it a basic part of his Army life is exemplified in the three articles that appear on the pages immediately following. It is surely significant that they came to us unsolicited from such widely separated parts of the world as France, Kansas and the Pentagon. Each in its own way is a testament of faith—an avowal that the U.S. Army is and will remain militarily efficient without becoming militaristic.

Brigadier General Frank W. Moorman's testament is a powerful affirmation of the spiritual and moral soundness of the U. S. Army.

On an entirely different level Colonel Hugh M. Exton reminds us that along with the spiritual values affirmed by General Moorman, the American professional soldier can count on certain material advantages, rarely available to other Americans.

In the final article a younger officer (and while respecting his modesty in desiring anonymity, we do wish he had consented to the use of his name) strikes lusty blows for the Army of the future, affirming that necessary reforms lie largely within the power of the men of the Army themselves.

Together the articles lay bare the fundamental tenets of the way of life of the professional American soldier. We invite the reaction of our readers—military and civilian.

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THERE'S LOTS THAT'S GOOD ABOUT THE ARMY
Colonel Hugh M. Exton 24

THE WEARING OF THE ARMY GREEN
Major Multissimus 26

What the Jest Was Worth

BRIGADIER GENERAL FRANK W. MOORMAN

JUST as some take morbid joy in composing their own epitaphs or sleeping in their coffins before the final resting, I have lately been afflicted with the urge to compose a sort of farewell address to my fellow staff officers. Such things as commencement talks and panegyrics to dead eight-balls tend to clog up with emotion and even with an honest man some unintentioned insincerity creeps in. Life is ordinarily so continuous that the final closing of any door tends to blur what might have been but clay and leave at the last only clean-cut marble sacredness. My own premature memories are no doubt cloyed with donkeyishness, but I trust with some strata of golden truth. They are offered for publication at this time to correct a slight budgetary imbalance which is darkening my usual rosy outlook.

Perhaps the most insistent of my future memories will be the certainty that I passed my working years in a nobility of spirit and an integrity of intent not widespread upon the surface of the land. What portion of this nobleness and grandeur activated my own personal microcosm I leave to historians, but surely it was there and if I did not partake, it was my own great fault.

If I was not, at least I could have been, a gentleman.

Let us start with the front lines. They are not manned by the great bulk of the U. S. Army but it is the part that the enemy sees and so should not be entirely disregarded.

Brigadier General Frank W. Moorman was commissioned in the Infantry in 1934 and spent four years with that arm. Thereafter he spent six years with the Signal Corps. He served with the 82d Airborne Division during the Second World War. Presently he is the Army Attaché with the U. S. Embassy in Paris.

Consider the rifleman or more accurately the infantryman. Over the years I have had occasional contact with this creature in his unnatural habitat and elsewhere but mainly I have read about him. While not one to say that no one ever beefed up a citation or permitted an injudicious squandering of adjectives, I have read citations in which only half the bare facts were enough to make me take a sip of my coffee with canned milk and stare thoughtfully out the window.

Strangely my most enduring recollection is of a member of the trade who unhappily enough was shooting in *our* direction. It came about in this fashion.

One day in Normandy I was drowsing in the CP, submerged in umbilical contemplation, when General Andy March, our artillery commander, burst upon me badly shaken and oppressed. He had been down the road participating in the destruction and later capture of a Normandy village and was far from his usual crusty self. He had been deceived and nearly killed by a man who refused to accept the obvious.

As General March explained it our intentions towards this village had been of marked seriousness. We had begun with aerial bombardment, followed by careful and systematic artillery coverage, infantry mortars playing a soft accompaniment. Finally the smoking ruins were dusted off with machine gun fire and then, to use General March's own words, "Like a pack of fools we started walking down the road toward this town. We knew if anyone was left alive he had no will to fight. And in the lead went the biggest fool of all, old Andy March."

This parade of wooden soldiers broke ranks without command when from the smoking, uninhabited ruins came the angry punctuation of machine-gun fire. The insistent determination of an infantry soldier who had been posted there and given his field of fire and who was not dead although he should have been, who had not been relieved by the man who put him there, denied the obvious. As General March hit the ditch his face was scratched with brambles and his soul was scarred with bitterness.

His soul was scarred with bitterness of a very angry sort and when I saw him he was fuming still. Like others of his trade he had survived the weary and complacent years when the obvious pretended to fact and the tender dreams of all mankind rose up to tempt and seduce us. Ineradicably in the hearts of all of us is the dream that if wars cannot be avoided they can at the very least be waged with logic and with sense. Although occasionally craven, mankind is possessed of courage and, if convinced, will die. To die bravely for a noble cause is surely great but to live bravely is a step above and only with difficulty inside our reach. Hence the great human hope to kill safely from a distance or to die bravely in one terrible explosion. Neat. Clean. Without constant nagging doubt, or cold food, or a sore toe, or no mail from home, or waiting in the dark. Hence the hope which is the father of belief that terrible explosion and awful calamity will not only kill but convince.

General March had been carefully nurtured to the contrary. He had been explicitly taught and infinitely instructed that man can disbelieve in death until it happens or until another man, equally disbelieving, brings the promise of it with his own two hands and the determination to inflict. He knew that a soldier who really is one would keep on fighting until he died or until another soldier made him give up. He knew that facts are not facts and that hopelessness is a grammatical expression fit only for school books. Yet when he saw the terrible smoking ruins and the unimaginable destruction, human nature triumphed briefly and only the sound of bullets skipping

in the dust restored him to his illogical certainties.

After they had sent an American infantryman down to dig out this vestigial obduracy and things had been tidied up, General March roared out his self-castigation to an innocent nonparticipant and thus restored his anguish balance. He had sufficient perception to resent his momentary aberration more than another could have told him. He was a soldier and a good one, self-caught in heresy.

THERE are paradoxical overtones to this that smoke up between the in-basket and the out-basket and obscure the deadlines. The swivel chair and the calendar pad are more suited to virulent sanctimony than to the inditing of tribute to an enemy soldier. The inconclusive uselessness of war so outrages the decencies of mankind that those who are sheltered have not the conscience to send out brave men to die except against a wicked and unmitigated monster of the flesh. At this distance we must hate, and lacking any reservation we must hate them all. Yet, if I am to believe my on-the-spot informers, hatred winnows out between the cold and fear and the loneliness and except sporadically in the battle fury only bits of it get to the front lines. The United States infantryman can speak with admiration of the enemy because courage knows no tariff walls and need not show a visa at the border. It is truly universal and he who has it feels kinship with him who also has it. And in case you had not heard, the United States infantryman has it wholesale.

There are times when he has more. There are times when he has everything, everything we live for and are willing to die for. It is not for long and it is not everyone who has it but it is enough. And there is enough left over for all of us to share and to absorb.

It comes about in battle when each side has given to the utmost and the word comes down that more is wanted. Just as the one-horse shay crumbles into dust, it comes time to take another spin around the park. Just as nothing more can be done, something more must be done. Move up. One more step. One more hill. One more limited objective. (The front was relatively quiet with only minor changes in position.)

If the infantry soldier moves on at this moment when he is tired and hungry and cold and afraid, then who is to say whether it is the will that drives the tired and aching body forward or the endless strength of the young and healthy animal that keeps the will alive? At this moment for one fleeting breath of time the animal combines with divinity and it becomes impossible to separate the two. At this moment God who made man in his own image becomes indistinguishable from his image and there is doubt as to which is which. This is the true transubstantiation; his flesh becomes the flesh of God and his blood, God's blood. The soldier himself is only aware that his feet hurt, and would honk derisively at any such characterization. Nevertheless it is these men at this moment who provide the spiritual strength that is there for us all to partake and which has entered into and become a part of the soul of such men as Marshall, Bradley, Ridgway. These officers have strong bodies, fine intellects, great souls in their own right. But infused into these qualities comes inevitably the strength and the glory of the infantry soldier, and personal integrity instead of a mere belief becomes an instinct, a primal force, a part and parcel of the man no more separable from him than his arms or his legs. Love of country swings out beyond July the Fourth and is so integrally compounded into their structure as to have as much news value as the time of day. Slogans and creeds and mottoes designed to inculcate a sense of duty twist out a weird sense of unreality, a sort of vulgar embarrassment in the promiscuous display of sacred and eternal things. As well tell a man to see that his heart keeps pumping out the blood.

NOR are these things reserved for the mighty and the great. As the great would be, and are, the first to proclaim, it is for us lesser ones to bridge out the gap between the grand old masters and the cold steel out in front.

The building of this bridge is our very great responsibility and our privilege. The infantry soldier is produced, not born. He does not spring full-panoplied, crammed with expletives, from the brow of long-dead pioneers. He is manufactured from governmental specifications with unacceptable tolerances. He is not the product of long training for with long training he would be too old. He is not highly skilled for if he were he would be driving a truck or bucking for regimental supply clerk. He has neither the education nor the ability to be an officer or in war he would be one.

If the infantry soldier moves on at this moment when he is tired and hungry and cold and afraid, then who is to say whether it is the will that drives the tired and aching body forward or the endless strength of the young and healthy animal that keeps the will alive? At this moment for one fleeting breath of time the animal combines with divinity and it becomes impossible to separate the two.

I trust I shall not here be faced with indignant outcry from lady novelists and their faithful flock. I have not read war novels in recent years but during my splendid youth I read about a multitude of characters who, and the phrase was nearly classic, "consistently refused a commission throughout the war because he did not want any of the glory." Such a phrase is designed to tickle the sour risibilities of anyone who has been a wartime second lieutenant of infantry and his sympathetic observers such as I. We are aware that a wartime second lieutenant of infantry is a harried nonentity, full of woe and of sorrow, mightily oppressed by his superiors and scurvily misled and deceived by his so-called subordinates. He dies with a frequency not actuarially encouraging, but almost never heroically. Generally he dies by accident while making a useless trip to make sure someone has done what he should have done anyway, or by a stray shell, or a grenade that should not have gone off or that went off in the wrong place, or simply in line of duty. He is ordinarily too busy and too preoccupied to be a

hero. Since he frequently needs to be replaced he tends to arrive fresh from a ninety-day school, beardless and frightened, sick at his stomach and manifestly uneasy. I can understand a man refusing a commission because of laziness or incompetence or simple cowardice. But to avoid glory . . . tell that to the horse marines.

If the infantry soldier is not a creation but a product, of what is he a product? Swing around the noncommissioned beer gardens and ask one of the old sergeants moodily waiting for the foam to subside. Assuming he is thinking of his work at all, he will be far from death on the battlefield. His ruminations tend rather in the direction of what the newspapers with leaden jocosity refer to as close-order drill and allied subjects. Rifle marksmanship. Making triangles. All winter long on the dayroom floor making heroes out of triangles no bigger than a pencil end. First echelon maintenance. Getting rid of dirtiness. Button up that coat, soldier. Saluting. These things are important and for some reason not known to me are part of what makes a man stand up and walk forward under machine-gun fire.

If the infantry soldier is not a creation but a product, of what is he a product? Swing around the noncommissioned beer gardens and ask one of the old sergeants . . . close order drill. Rifle marksmanship. Making triangles. All winter long on the dayroom floor making heroes out of triangles no bigger than a pencil end. First echelon maintenance. Getting rid of dirtiness. Button up that coat, soldier. Saluting. These things are important and for some reason not known to me are part of what makes a man stand up and walk forward under machine-gun fire.

BUT these are mechanics, the body not the soul. The soul must come from our corporate integrity. Unless we believe that duty really is something worth dying for, and more important, worth living for, neither will he. If we believe it, and really believe it, we must live it, each day after dreary day, and forever.

Perhaps in a stumbling way I am approximating the essence of a gentleman. To be dedicated to a cause greater than ourselves. To endure patiently and with steadfastness. To ride, to shoot and speak the truth. To create and be a part of a spiritual soil on which the seeds of valor can be cast and their subsequent germination bring quick-flowering into life a product greater than us all by far. That is the essence and alone would be enough but the trimmings are of interest, too.

I am what you might call a fan of democracy as it breeds and flourishes in my native land, but certain of its minor manifestations do not arouse my entire enthusiasm. One of these is our passion for the outward semblances of equality.

Equality itself gives me no pain. Equality of birth. Equality before the law and in God's house. Equality of vote. Equality of educational opportunity. Equality of the right to get ahead. But there comes the rub because you cannot get ahead and still be equal to him who was left behind. No one denies this. It is true. It is even bragged about before the fact but after it has happened it is never mentioned and somehow looked on as shameful. I refer, of course, to the infamous caste system where one man is not only better than another sometimes, but always so designated, published and proclaimed by the law of the land and the custom of war in like cases. The caste system exists at all times and everywhere. It exists in the Army, which is perfectly natural, but our sin is that we admit it. We have a caste system in the Army. We once had two.

In my gold-bar days when there was still darkness upon the earth I was a member of the officer caste. Alongside of me and equally flourishing was the noncommissioned officer caste. This latter has now largely disappeared, to the great detriment of the men then enmeshed in its toils. It has disappeared ostensibly in a move to prove that an enlisted man is just as good as an officer. Back in the days when I was addressed only in the third person that question never came up.

Just as good for what?

IS it seriously advanced that the tough old master sergeants that I knew would have made as good a second lieutenant as I? That is absurd. In the first place they were too old. In the second place they were not sufficiently innocent and dewy-eyed. They were prisoners of their own manifest capabilities. In the third place they would have resisted any such move with the whole fiber of their being. Most of them became officers during the war and in my opinion largely to their vast dissatisfaction and resentment. No one could have been higher ranking in the old days than a senior master sergeant. There was a community of spirit between him and the old colonels that shut out such an arrant newcomer of unproven worth as I was. He was a man who had reached the top. I was one who had hardly begun. I mention this just in passing and I could well be wrong but I think he was a happy man who lost his birthright. During the war at least, he was a man who was not yet a second lieutenant. How awful. How incredibly distressing to be someone who is not yet a second lieutenant. Every time we bust up a caste system we take away a top to get to. It is a great satisfaction of the soul to get to the top. There should be more of them.

Such as it is, rudely buffeted and creaking at the seams, the Army caste system still survives. As near as I can figure out, this system requires us to say, sir, in one direction, to stand at attention at prescribed times and to salute in a given manner. At the hazard of being declared a security risk I maintain that a rigid insistence on established and quite formalized courtesies is part of the education of a gentleman. That the rendering and the reception of such protocol discipline and perfect the man of noble mind. Unfortunately a considered judgment of the system is only possible after long years of experience with it which means from the top of the ladder or near it, and hence is suspect. You may if you wish put on a knowing smile

but in my younger days military courtesy was simply part of the landscape and hardly one of my major preoccupations. It is only of late years in the glowing magnificence of general office that I have been uneasily stirring in its trammels. I have no way of knowing if my reaction is unique, but for one small voice in the wilderness I have found it here more blessed to give than to receive.

FROM a management viewpoint, as the saying goes, the caste system presents certain advantages that are so universally derided that they need occasional airing. The caste system not only exists universally but it contains elements essential to its participants who are after all but members of the human race. I refer largely to the ego. As any psychiatrist will tell you the human ego is a weak and puling thing, fretful as a sick child, and always in need of being propped up, bolstered, injected with vitamins or otherwise kept from falling flat on its face. In the great world of "I am your friend and we have no rank in here" this must be done in a variety of ways. If we are all buddies then no one can be the first buddy without a sort of perpetual vote of confidence, a constant reassurance and, in the worst cases, a host of yes-men.

I get off here into the quicksand of psychology which is not my ticket but I am not speaking of sycophants who are everywhere in and out of the Army and who include in their ranks, in varying degree, at least sometimes, sadly, such rugged non-conformists as you and I. Some of us polish the apple all of the time. All of us give it an occasional rub. That is human nature and outside the system. What I am speaking of is the need for ego support incorporated in the system. Such support must be there so long as we have human beings in the system and if it must be there it seems sensible to acknowledge that human weakness, get it in, get it done, and get on with the work of the day. To my straightforward mind the salute, the standing at attention, and an occasional sir, in addition to their worthier purposes, do this neatly and with a minimum of trouble; a sort of all egos on the double for personality injections, biff, bam, you are next, drill call in ten minutes. Where everyone is known by his first name or by his initials seems more complicated to me.

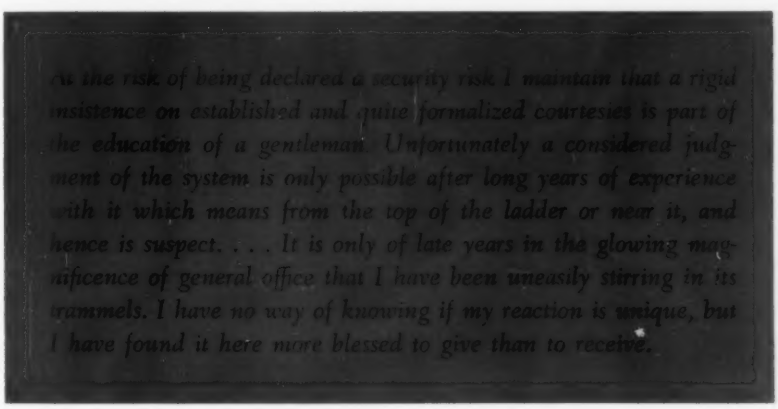
LEAVING aside the readily admitted apple polishing, I have never in the Army felt the need to be a yes-man, again because that is the way the system works. It has never occurred to me when a commander asked my opinion that he cared two cents whether I agreed with him or not. When it was done he had to make up his own mind and if he was wrong, he paid. I cannot imagine a commander admitting he was badly advised by his staff and I can very readily imagine a staff being scientifically eviscerated by a commander who had not been warned by his faithless advisors that he was on the road to ruin. Thus, as I see it, there is in the Army a rigid system of protocol within which a man of independent spirit can oscillate to the extreme limit of the meager capabilities with which he has been endowed by the Creator. That, too, is part of the trappings of a gentleman.

Lastly, or almost lastly, and I am nearly done, a gentleman should have minimum standards of dress and decorum. We went backwards when we started wearing sport shirts to the theater. It seems hard to ask everyone to own a tuxedo but they cost no more than any other suit and last a lifetime. At least mine did until it could not be let out any more at the waist and I had to get a new one. More than one social worker secretly believes that the adolescent antics now pre-empting the headlines would subside in some degree and the perpetrators act more civilized if they wore more civilized dress. Whatever the answer to that and other painful questions, a man who has his coat buttoned up and his hat on straight at least looks like a member of the fraternity of gentry.

To sum up then from the mundane to the unmentionably sublime: a coat and a hat and a tie, a stratified hierarchy with its insistent and often artificial demands through which one may, and often does, freely pass from private to four-star general, and a reason for being that goes beyond the individual to drag in all those worn-out words such as honor, courage, duty, and devotion. If that does not describe a gentleman, it will have to do for now.

There is a side benefit, a sort of plastic toy found inside the cereal box and that is the mark of the beast. The Army is not a system you can pass into and out of like an amusement park. One way or another the brand stays on and when you leave some of you stays behind and some of the Army leaves with you. I am not all mine any more. When I raised my right hand on a summer day in 1930 and became a part of you I was sold into Egypt. There is now no fault that you can commit that I do not somehow share in the shame of, and your great deeds, notwithstanding what either of us can do or say, will reflect their luster upon my house and make it shine. It is poetic. It is corny. But it is so. It will always be so.

Let us frankly grant that the cup of joy did not always overflow. And yet when the old Coleman lantern gutters out and when they make tent ropes that do not shrink up after rain and when no one ever falls in a garbage pit I believe that I can truly say that I have lived with gallant gentlemen whose comings and whose goings have engendered in me a respect of high order not entirely unalloyed with affection.


At the risk of being declared a security risk I maintain that a rigid insistence on established and quite formalized courtesies is part of the education of a gentleman. Unfortunately a considered judgment of the system is only possible after long years of experience with it which means from the top of the ladder or near it, and hence is suspect. . . . It is only of late years in the glowing magnificence of general office that I have been uneasily stirring in its trammels. I have no way of knowing if my reaction is unique, but I have found it here more blessed to give than to receive.

There's Lots That's Good About the Army

COLONEL HUGH M. EXTON

DURING the past few years there has been a lot said and written about improving the career attractiveness of the Army. Decreasing reenlistment rates and the increasing resignation rates are evidence of the difficulty of keeping good people in the Army. The many disadvantages of Army life —family separation, low pay, housing shortages, long duty hours, and so on, have been cited endlessly. Is it any wonder a young man shies away from going into the Army voluntarily or making it a career? Practically all he hears or reads is what's bad about the Army; seldom does he hear or read what's good about it. There must be something good about the Army, since some 100,000 officers and more than 300,000 enlisted persons with the necessary qualifications are staying in beyond their initial obligatory tours or first enlistments. Perhaps if we talked and wrote more about the things that keep these people in, we might be able to persuade more to come in and stay.

I must preface this discussion of the bright side of Army life by admitting that I write subjectively. Being an officer, I know more about officers than about enlisted men. Naturally my views are shaped by what I have done and experienced. But also, having served in the personnel business for two years, I have acquired a certain amount of over-all knowledge of the pros and cons of Army life.

Soldiers are people

First, what kind of people are we soldiers? Let's look at the people with whom the career officer or noncommissioned officer associates.

I suppose the Army has the same kind of people as any organization: highly skilled professionals, dedicated hard workers, adventurers, dreamers, lazy deadbeats, and incompetents who somehow are never found out. However, the proportion of the dedicated hard workers impresses me as being unusually high. These are the men who love the Army and its traditions, who are happy to be engaged in a profession that has the high duty of protecting the nation and who are not interested primarily in personal gain. In such a group it is natural to find a high order of integrity. Such an atmosphere of trustworthiness provides most enjoyable associations. You don't normally have to be suspicious of devious intentions on the part of anyone else. There is tremendous satisfaction in working under these conditions.

Let's look at some of the other types who serve the Army well.

The adventurous group consists of men who love to travel, enjoy a good fight, and are happiest when commanding combat outfits. When there's no war or when not in command jobs, they sometimes do not do so well. But they add zest to our life and are worth their weight in gold when fearless, aggressive action is called for. The dreamers and the highly skilled professionals are the ones who stimulate us to progress. The former group may sometimes lack practicality, but they are the fermenters of the new ideas that keep the rest of us on our toes. The skilled professionals are the technicians who take the new ideas and make them work.

Men like these provide a wonderful environment in which to live. Because of them life becomes interesting and stimulating. Never doubt that one of the great advantages of Army life is the many fine men you associate with.

The Army develops great comradeship. This is largely because we are all in the same boat. Grade for grade, our pay is the same and over the long run we serve under similar conditions, good and bad. Thus, jealousies are minimized and throat-cutting cannot raise one's salary.

The world is our beat

If you don't like to travel you won't like the Army. As a result, we learn much more about foreign lands, peoples, and customs than non-travelers do from books or movies. We can ride down the Rhine past the Lorelei, climb the Eiffel Tower, smell the Casbah of Casablanca, watch the nomadic Arabs pitch their tents on the desert, worship at St. Peter's and sail a *vinta* on the South Seas. This probably sounds like an advertisement for a travelog, and I could be accused of leaving out the opportunities for feeling the lonely cold of the DEW Line, for enduring Korean nothingness, for suffering in the sweltering heat of East Africa. Also, there are such things as inadequate schools for our children in some places and the opportunity of going into debt at high-living-cost stations. But taking the bad with the good, our understanding of our allies and enemies and of the reasons for international misunderstandings are measurably broadened by travel.

For the average civilian, traveling can be quite a burden. He has to make all his own arrangements for transportation and billeting and, except for travel agencies, he has no one to whom to turn for advice or assistance. In the Army, on the other hand, wherever you go about the world there are peo-

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ple you know or of whom you have heard through mutual acquaintances. So, you never have to worry about arriving in some far-off corner of the world and being on your own. There is always someone who will see that you are well taken care of, who will put you up or have you to dinner. Some commands have established procedures for meeting families, stocking their quarters with food, putting in furniture, and even hiring servants. When the family arrives it moves right in.

The job's the thing

To most men the most important factor is job satisfaction. One of the great things about Army life is that a man can serve in such a wide variety of assignments. There are jobs to suit the tastes of everyone. If you wish to be close to diplomatic activities there are the many attaché positions with embassies in foreign countries, duties with several international organizations, SHAPE, military assistance advisory groups, and special jobs with Government agencies. If you are scientifically minded there are ample research activities concerned with everything from preserving food to developing earth satellites. You can be an instructor, either at a service school or with ROTC at civilian universities. A man can become a student again and earn degrees in international relations, nuclear physics and many other fields of learning. You can be a policeman, a musician, a financier, or operate a grocery store. With the proper training you can be a doctor, a lawyer, or a minister. If you have a humanitarian bent, you can count on being involved at some point in your career in caring for people hurt by floods, hurricanes or war. If you happen to have the right job in the right place at the right time, maybe you'll make the headlines because you rescued people off a mountain top, from a small lifeboat, or from a rooftop in a flooded town. Maybe you have dreamed of being a detective or engaging in international intrigue. There's a place for you with CIA, G2, CIC or MPCI, to mention only a few.

Think a moment about the job of a post commander. He is responsible for everything pertaining to the operation of a small city, including the welfare of its inhabitants. Isn't this like being a city manager or mayor? Then there are the hundreds of technical jobs dealing with chemicals, vehicles, ammunitions, weapons, construction, shipping, and communications. Or, if a man likes paperwork, the Adjutant General's Corps can accommodate him.

Finally, there is the *raison d'être* of the Army: troop duty. In my opinion, there can be no more satisfying job than commanding a squad, a section, a platoon, a company or a larger group of men and being responsible for their training and welfare and, in fact, their very lives in combat. Here is the job that challenges every aspect of a man's character and in which he can see the results of his efforts. Here is the job that produces heartaches, frustration and fatigue at one moment and pride and exhilaration the next. There's nothing like it.

I mentioned briefly the opportunities in the Army for the man who wants to be a student and gain further scholastic honors. In addition to these opportunities, there are the many courses in the service schools which provide formal instruction in everything from cooking to politico-military strategy. While I believe that a man, during his Army service, must give it his best, all of us must admit that we have to remember that retirement, like time and tide, waits for no man, and very few of us can be fortunate enough to leave the Army for a life of financial ease. I think also that after the pace of Army life, a sedentary existence can be somewhat deteriorating. In either case, the schooling received while in the Army can be of great value in finding a remunerative and satisfying occupation after leaving it. Unfortunately, this seems to work against the Army too, as one of our great difficulties today is retaining men who have been educated by the Army and are consequently in demand in civilian industry. A further unique educational opportunity in the Army is that of attendance as a student or instructor at foreign service schools. Aside from the professional advantages of association with foreign military men there are many personal pleasures and friendships derived from tours at foreign schools.

Recreational opportunities

We must remember that life should not be all work but should also include some play. So how about the recreational aspects of Army life? To those of us who are stationed in civilian metropolitan areas this may sound like a joke, but even there one can usually find a military installation with available recreational facilities. Almost every Army post or overseas station has its officers' and noncommissioned officers' clubs where dues are considerably cheaper than at civilian clubs and which have golf courses, tennis courts, swimming pools, skeet ranges, and bowling alleys. Sometimes these facilities may be provided by Special Services. There are opportunities for social gatherings, dances, dinners, bridge games, or oyster roasts. The various organized groups seem to run on *ad infinitum*, such as garden clubs, women's clubs, book clubs, art classes, music appreciation groups, cooking and sewing classes. Children's activities are provided through lessons in various sports, teen canteens, Christmas parties, summer camps, and dads' clubs. Tied in to the advantages of travel are the opportunities for many sports not readily available to everyone. You can enjoy deep-sea fishing in Panama, wild-boar or mountain-goat hunting in Germany, skiing or tobogganning in Switzerland, bear-hunting and salmon-fishing in Alaska, surf-riding in Hawaii, pearl-diving in the South Pacific, mountain climbing in many places, judo wrestling in Japan, bicycling in England and bullfighting in Spain. I think that we in the Army are sometimes inclined to take these opportunities too much for granted. We forget how cheaply and readily we can enjoy them as compared to the average civilian; we don't always stop to realize how dull life would be without them.

There can be no more satisfying job than commanding a squad, section, platoon, or company of men and being responsible for their training and welfare and, in fact, their very lives in combat

The prestige of the profession

One hears a good deal these days about raising the prestige of officers and noncommissioned officers. The procedures which many people feel have tended to lower prestige are largely Army-developed and hence this is a matter correctible within the Army. All evidence seems to point up the fact that Army officers and noncommissioned officers are highly respected by the great majority of the American people. I think this is well demonstrated by the fondness for military titles on the part of so many people. Men who served in the Army many years ago still use and are addressed by the military titles they once had. Wedding announcements in the society pages of newspapers frequently use the title of the groom even though he may be serving involuntarily as a draftee or recent ROTC graduate.

Many former Regular Army officers and noncommissioned officers have obtained important positions with industry, business, educational institutions, or government agencies, which certainly attests to their high prestige. The respect for and confidence in members of the Army shown by business and banking firms is illustrated by the generally very favorable consideration given in matters concerning loans, charge accounts, and term-payment plans. Two years ago I obtained a large loan with which to purchase a house by simply telephoning my request to a loan company. I never had to sign an application or give any references, and while I'm not so naïve as to believe the company didn't investigate my credit status in some manner, I am of the opinion that a civilian could not have obtained this loan with such ease.

In many civilian community associations you find military men in the positions of leadership demonstrating the confidence of the communities that their interests will be well represented where necessary. I think it is extremely satisfying to feel that you have the respect of so many people merely because of membership in the Army. It behooves all of us to live up to and continue to earn this respect.

The summing up

To this point I have not touched on such things as survivor benefits, retirement income, medical care, and commissary privileges. I believe there has been too great a tendency in the past to attempt to isolate these items as comprising the so-called "career attractiveness" package. While a man cannot and will not remain in a job where the financial remuneration does not provide him an adequate standard of living, the old saw that "money isn't everything" is certainly true. The pay scales of the Army have lagged behind civilian industry and professions, but Congress does take steps periodically to narrow the gaps. At the time of this writing no legislative action has been taken concerning the Cordiner Committee's proposals, but I personally feel optimistic. And that illustrates the point. I believe we can have confidence that the people of the United States will never let the standard of living of its military forces fall below an adequate level. A man in the Army should not expect to become a millionaire, but I think he can count on receiving a proper wage. The financial benefits I have mentioned are tremendously important as they augment what we often consider to be such low pay. But career attractiveness cannot be isolated because it is the sum total of everything in and concerned with the Army.

To sum this up, there are many good things about the Army. Army life can be interesting, challenging, and enjoyable, but only if we make it so. By this I mean that, aside from the pay problem I touched upon, we must assure the use of procedures in the Army whereby its personnel are assigned to jobs commensurate with their abilities, duties are made interesting and challenging rather than bogged down by inconsequential trivia, undesirable jobs are distributed fairly and equitably, authority and responsibility are properly delegated, and all notions of defeatism are eliminated. A little accent on the positive for a change will do a lot for the Army.

The Wearing of the Army Green

MAJOR MULTISSIMUS

OUR Army must be peopled by those who love it. If this weren't so, the continued discomfort, the self-denial of boom-time earnings, the long separations of families, and the attitude of civilians (ranging from boredom through annoyance to detestation) would be unendurable.

The dedicated service lavished on the Army by those who love it should make it a proud Army. But it is not. Thousands stand guard at lonely AAA batteries, thousands labor in far-off headquarters, an array of combat units is on watchful alert in the deep valleys of Korea. The young lads learn the skills of paratroopers and of rang-

Multissimus is the pseudonym of an officer who is attending a service school.

ers and the old colonels finish their race as good men should, putting out to the last. Army medicine, Army weapons, Army schools—all work for the Nation's salvation with a diligence unmatched except perhaps by the clergy.

In return, the public is apathetic or scornful, and "Pentagon," in civilian parlance, is a synonym for senseless waste, confusion, and featherbedding.

Recruitment is down to where it might be called a consummate failure. Lieutenant General Weible wrote in the February 1957 issue of *U. S. Army Information Digest:* "Despite the actions taken to increase the attractiveness of the Army, voluntary enlistments through the Army Recruiting Service decreased twenty-one per cent during the year, as compared to fiscal year 1955."

Within the Army, the unending flow of personnel into and out of units large and small makes a mockery of all efforts toward training, *esprit*, and discipline. Officer morale is likewise low. Twelve years after winning World War II, families are rent asunder for as long as six months, for reasons inexplicable. "Concurrent travel" —that pearl, that carrot—is not yet!

Gyroscope, intended as a noble and effectual measure, has pleased its detractors by becoming just what they cynically foretold: a flag-bearing pipeline by another name, whereby packets of casuals, hastily assembled at one end, are masqueraded as the "famed Umptieth Infantry Division," shipped home, and as hastily dispersed.

These are things which we, who love the Army, see on the inside.

The outside view

But what does the public see? If they visit an "Army camp" today (and a few do) they still see, in general, bleak, repetitious rows of the yellow two-story barracks of their usually loathed World War II memories. Painted rocks. Consolidated messes. Recorded bugle calls, or none at all.

If they don't visit an Army post, they see next to nothing at all. When they read of the Army, more often than not they read things that are critical. Exercises Sage Brush and Jump Light may get a paragraph or two, though rarely a picture. But virtually nothing is printed to counterbalance "Two GIs Held for Theft Here," "Army Brass Meets," "Wilson Quashes Army's Air Ambitions," "Slayer Proves Army Deserter," "GI Behavior in Germany Worsens." They may read of the "historic 101st Airborne Division," but it is *not* historic to them. They know neither what a division is, nor why it is historic.

The Army lacks publicity-building hardware. We have no *Missouri*, no *Forrestal*, no *Nautilus* to show. We make no around-the-world non-stop flights (at budget time). We have men—great men, some are generals and some are sergeants—but they wear a uniform grown common, prostituted to delivery-boy workclothes.

The difficulties of public relations, vexing as they are, are compounded by the necessary precautions of security that must hide our newest and best and proudest achievements. But sometimes we who love our Army are driven to surmise that it purposely vilifies itself; and that our own public-relations people are our direst detractors. Milton Caniff receives a medal from Secretary Quarles for his "long, effective, and accurate portrayal of the Air Force" in the comic strip "Steve Canyon" but *Army Times* features "Beetle Bailey," a disgusting, unfunny satire of an army that never existed. And on Tuesday night, just before they see "Navy Log," millions of the public roar at "Sergeant Bilko." Now this "sergeant" is funny, engaging, and even endearing. But in essence he is a four-flusher, a sharpie, a cad, who exploits an oafish colonel and an element of tramps, no-goods, and semi-criminals doing nothing all day long.

The forward foot

On 21 December last, a large number of "soldiers" from a training camp got Christmas leave. Unshorn, discourteous, and clad in wrinkled, unadorned recruit uniforms of pathetic fit, they swarmed about the country heading for their homes. Stricken with remorse, I asked a few of them I met on a train about their basic training. They had had no training in any subject whatsoever! They had been released on leave, poor young boys, three days after reporting from induction stations. Oh, what damage the mere sight of them did, too! Better far that the Army vanished indeed from sight.

Anyone who thinks such things as our sequestered excellence on the one hand, or our visible public relations, Bilko's and Bailey's on the other, do not directly affect our budgetary fortunes is simply unacquainted with the heart of the matter. We are the public's Army. We absolutely owe it to the body politic to put forward our best foot. But sometimes it seems that foot is gone. Overseas, maybe. Or else we have forgotten how to put forward any foot at all.

Let those of us who love the Army resolve that no one but the Army shall wear our uniform. Let the Army Green—ever the color of hope—be worn by the Army alone and worn correctly. Let this refreshening of the uniform be not the end but a beginning . . .

Hope springs new—and green

But we *love* the Army. And hope springs eternal, and somehow remains green. Ah, *green!* Among the more incandescent PIO projects recently was the contest to name the color of the new Army uniform. Large cash prizes were offered. After much delay, to consider an undisclosed number of entries, the Department announced the following electrifying name—apt, original, accurate: "Army Green!"

However pathetic such attempts may be, the change into a new uniform can be the occasion for the long-awaited, desperately needed change in the U. S. Army's public posture. Like surgery, the change will be painful (to our pocketbook) but it can prove curative. When the green Army appears, it has a new chance with the public to appear to advantage—divested of all its former olive-drab mistakes. And it will be our last chance for many a year to come.

Here are some of the things we who love the Army (let those who do *not* love the Army go, in the name of God!) should resolve. First, let us all, from corporal up, resolve that *no one but the U. S. Army shall wear our uniform.* Let the Army Green—ever the color for hope—be worn by the

Army alone and worn correctly. And heaven help the soldier who parades across our view unbuttoned, his cap in his shoulder strap!

Charter for a new beginning

Let this recrudescence of the uniform be not an end but a beginning. Here are some reforms that we can begin tomorrow, that will bear mighty fruit, and *will cost nothing:*

Exterminate the term "brass." Let all who use it, in word or print, know that it is deeply offensive to us personally and corporately, and we will not countenance its use any more.

Send our mustered-out soldiers away at the end of their service happy, with a good feeling for us. Send them from us as "graduates," with a hearty "glad you were one of us." They will cease becoming our civil-life detractors and will become our advocates, our salesmen. And send them away *sans* the Army Green uniform.

Reform recruiting policies. Stop promising training "to better your civilian job." Start an are-you-tiger-enough-for-the-Army? campaign. Teen-age America today thirsts for adventure, for "belonging," for a different, a challenging life. Let the Army offer this as in its power to give. Then *give* it.

Let's stop spending all our efforts on the thousands of hometown releases, which editors usually throw away—and wisely so. Stop the Elvis Presley induction idiocy. Discourage Bilko and Beetle Bailey.

Instead of a mere prefacing of the numerals by the adjective "historic," foster nicknames for units and *use* them. *Call* the 3d "Brave Rifles." Use, even in correspondence and print, terms like "Congress' Own," "All-American," "Rock of the Marne." Only let tradition be genuine. No bogus build-up.

Work up something like the "Men of West Point" TV series. West Point is not the Army; it is the Army's conscience. But the Army's wealth of anecdote and interest dwarfs that of West Point for TV purposes. And dwarfs that of "Navy Log." We need —must have—a Steve Canyon type of strip properly syndicated. It would be a recruiting instrument worth twenty jive programs.

Emblems and Mottoes

Instead of contests to name green Green, run a competition to design a simple, permanent Army emblem. Something so simple and good that recruits can (and will) draw it on their letters home. Something like the Marines' globe, anchor and eagle, that can be stenciled everywhere. The Great Seal, as on the Army officer's cap device, is, like the War Office seal on the new Army Flag—which God preserve!—too complicated. But the Army emblem could be a derivative of one of these. Let casuals and recruits in training wear a patch of this design. And let the Army put it everywhere: on our missiles, and on our footlockers, helmets, fatigues, stationery.

The Army needs, must have, but has never had, a motto. The Marine's *Semper Fidelis,* the Coast Guardsman's *Semper Paratus,* are of inestimable worth to them. Whether on a handsome Christmas recruiting poster or flashed on the screen at the end of a movie in Duluth, its effect is unparalleled. Give us something to live by—simple, memorable, right.

Stop the pernicious, cruel, and unforgivable practice of sending families overseas in two echelons. All armies have always had to figure out ways to send families overseas together and we must go to that trouble too. Either families may go to a foreign place, or they may not. But if they go, send them together.

Last, and still to cost no money, let's bring up our young soldiers and young officers to know and remember that all Army men are brothers. Put them and *leave them* in regiments (what though they be battle groups, or beefed-up battalions; call them regiments and call them by name). Give them something real to belong to, and let them grow into the brotherhood that substantial length of service in a good outfit never has failed to engender.

The wearing of the Army green

Now all these are Army's own reforms that need neither budgetary nor legislative boosts to activate them. In the coming days, there will be great changes in weapons, organizations, missions, doctrine. But if the Army has no good men, or if these men have not the willingness to commit themselves—for love—to a life in the Army, then all weapons, budgets, and laws will be as sounding brass and tinkling cymbal, and will profit us nothing.

"Now is the winter of our discontent." But soon we shall all put on the green. Just as most of the Army's real troubles are self-made, so are the cures for them within our power alone. If we have a real spring within our Army, we will find public apathy turns to enthusiasm, recruitment ceases to be our heel of Achilles, and Congress becomes our steadfast support.

Then, Army Green, I will most gladly buy you! (I think of the cold foxholes at Vielsalm.) Only put forward your best foot, old Army, and the private and I will have a long talk together on the train going home at Christmas. The future's perils will not all fade away by any means, but the Army will have back its soul, and we will live to bury our enemies. (I think of the wounded at Fallen Timbers. And the men on the ships off Hungnam.)

An Inspection of Command Inspections

Captain William A. Brown

Illustrated by
LT. COL. LACHLAN M. FIELD

SOME months ago I sat through a critique of a major command inspection of my infantry unit. I was bothered by what I saw and heard. The major deficiencies discussed were something like this: Beds needed repair; sinks lacked stoppers; clothing was not marked; progress charts were not uniform; a good piece of chicken had been found in the "edible garbage."

This inspection was supposed to measure the unit's combat effectiveness. Rocks were whitewashed, floors waxed, and shoes shined, so we made out pretty well. But not once during the critique, or during the inspection, was the question raised of whether or not the unit was combat effective. Inspectors were concerned about the police of the area and had no regard for what I thought was the basic mission of an infantry unit. No comment was made as to how well the men were trained; whether they could handle their weapons; when they last threw hand grenades or tested gas masks (or even if they knew how).

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A fine body of men

From my level, at least, that inspection had not accomplished what it set out to do. I could agree with the inspectors who said we were an excellent unit. Why not? The only thing I questioned was whether we were excellent in that part of our business that counts the most: the ability to fight. My men knew the cost of a canteen cup, the weight of their weapons, and the name of their commanding general, and so were rated high on training. What the inspectors didn't know was that in the two prior inspections the same stereotyped questions were asked on the same inconsequential subjects. Not once had an inspector asked probing, meaningful questions to determine if a gunner could handle his weapon or a squad leader his men.

This may sound like a gripe by a man who failed an inspection. That is not true. A company commander who has made inspections and observed others, I have concluded that our inspection system needs much improvement. I strongly believe that the combat effectiveness of our army depends to a great extent on what faults inspections expose. Since they are part of our everyday life, they are bound to have an effect on what we do and how we do it. If, in our inspections, we stress minutiae and nonessentials and neglect training and combat effectiveness, it follows that the Army will slide in the same direction.

Drop the check list

Going back to the example I cited, wouldn't it have been better if some technically qualified junior officer or senior noncommissioned officer had conducted the inspection, and asked pertinent training questions? Had the inspectors been genuinely expert and

not read from a check list, we on the inspected end would certainly have gotten an extra dividend from their appraisal. The first thing, then, is to eliminate check-list inspections, for they lead only to preparation for the check list and detract from initiative. Using a piece of paper as a crutch is a dangerous habit that can lead to commanding by check list.

As for maintenance, I know that most inspectors get a false picture of how well a unit is doing its job. For example, motor-pool vehicles are often deadlined in place for ten days to two weeks prior to inspection. Vehicles are borrowed from other units so that the deadlined ones can be gone over with a fine-tooth comb. Then, after the unit is commended for its spit and polish, drivers go back to their good or bad standards. The point is that the inspector gets a distorted picture. It goes without saying that if you adopt the deadline system, you can abuse and misuse vehicles 350 days of the year so long as you can get well in the remaining fifteen.

Surprise inspections

One solution would be for the command to make the inspection unannounced. I know this will evoke cries of anguish from commanders who have used the deadline system, but a really good unit will not fear such an inspection because it knows it is ready, and that it will be compared with other units under the same conditions. I go along with the crusty old regimental commander who opined that "You don't always get two weeks' notice to go to war." Unannounced inspections will insure that two weeks' notice isn't needed.

Inspecting a soldier's personal clothing and equipment is another thing that often seems to get far out of perspective. Where an inspection should determine if a soldier has the required serviceable clothing and equipment, too often the marking of equipment and other nonessentials are stressed. Are the soap and toothpaste in the platoon of the same brand? Are all toothbrushes of the same color?

Marking equipment

There are those who will argue that marking equipment is necessary but I have yet to hear an experienced company commander or platoon sergeant agree. The oft-used argument that markings help to recover lost equipment doesn't hold water. As one sergeant so aptly put it, "I've been in the supply game for twelve years, and have yet to see a piece of lost equipment returned from another unit who identified the mark." In combat, the constant resupply and switching of equipment among soldiers rules out the "casualty identification" argument. At best, marking shoes and belts accomplishes nothing. If you've been away from a line company for some time, perhaps you've forgotten that considerable time is consumed in marking and remarking equipment. Wouldn't it be better to use this time on critically needed training?

Count the spares

I have discovered a new game that is a favorite with inspectors, which I call Count the Running Spares. Here's how it goes: In every unit you have a considerable amount of what might be called "expendable accessories." Whether for a kitchen range, a radio, or a second-echelon tool set, they are all similar in that "you may not need 'em, but you must have 'em." If inspectors didn't require units to keep this unneeded equipment, hoarding for a rainy day would decline. Let the unit keep a minimum of spares and accessories. Suggest a non-mandatory average stock level as a guide in the tech service catalog. Make the unit justify an overage. If it is below the level, forget it—so long as the equipment is in operating condition.

Don't under any circumstances require the preparation of a requisition to bring a unit up to an unrealistic stock level. After a time you will find that unless such extraneous paperwork is eliminated, the supply clerk or the armorer worries more about locator cards and requisitions than he does about maintaining equipment. The old saw, "keep it simple," still holds. Make it less complicated and you'll have fewer gray-haired company commanders and bald supply sergeants. What's more important, you'll have better units.

Eyewash & Nit-picking

I believe the requirement for eyewash is in the same category as the nit-picking I have discussed. I'm not belittling neatness and cleanliness. I refer to the if-it-doesn't-grow-blitz-it-or-paint-it school of thought so popular today. At the inspection of a communications section some time ago the glittering brass parts on radios, telephones and other equipment attested to heavy work with blitz cloth. When the equipment was checked for operation, the commo personnel were amazed to find that it wouldn't work. "We heard you didn't inspect that in the other battalions." The moral is plain: Don't let eyewash blind you. Find out if the unit can cut the mustard. Remember that not all is gold that glitters—it is probably brass that shouldn't

have been blitz-polished anyway.

I recall an infantry unit whose supply sergeant still used a system that had been discontinued a year before. His not very good excuse was, "There are so damned many regulations coming out, and changes to changes, that I just gave up reading 'em." The good sergeant then showed me a set of regulations that were interpreted and changed at post, division and regiment. He had four headquarters telling him to do the same thing in four slightly different ways. All of them had issued enough changes to support a diaper laundry.

I was surprised to find that this supply room had been inspected each quarter by an officer from regiment, and the obvious fault had gone undetected. The lesson learned, I guess, was this: too many changes in operating systems, as well as too many different orders from different headquarters, confuse and irritate administrative personnel. We must remember that many changes, while desirable from a theoretical point of view, do not justify the confusion, cost, and effort required in making them and educating those involved. It is not a matter of resisting progress; the question is, is the change really necessary?

Grease pencil training

Too often we see inspectors rate a unit by what they see on the acetate training chart in the orderly room. Few, if any, determine if the progress chart truly reflects the state of training and if the men are really effective soldiers. If the chart shows the company had a hundred per cent attendance at all training (a very improbable situation), then the rating is, of course, that much better. Reliance on charts and graphs by inspectors has thus caused more than one company commander to train his company with a grease pencil.

No one has yet satisfactorily explained to me the use of a progress chart other than as an "inspector impresser." An argument often advanced is that you need these charts to show how much training a man has missed. However, that is not even nice-to-know information since few units have ever conducted effective make-up training anyway. Inspectors who ask for charts or graphs are only compounding the crime and adding to the already heavy administration load.

I remember a colleague who could spend an eight-hour day inspecting a mess hall without leaving the mess sergeant's office. He was so wrapped up in checking minor points on ration requests and cooks' work sheets that he never did get out to see if the beans were burned and why. If a cook uses green ink on his work sheet (it must be black or blue-black) and still throws together a good omelet, who am I to say he's a bum?

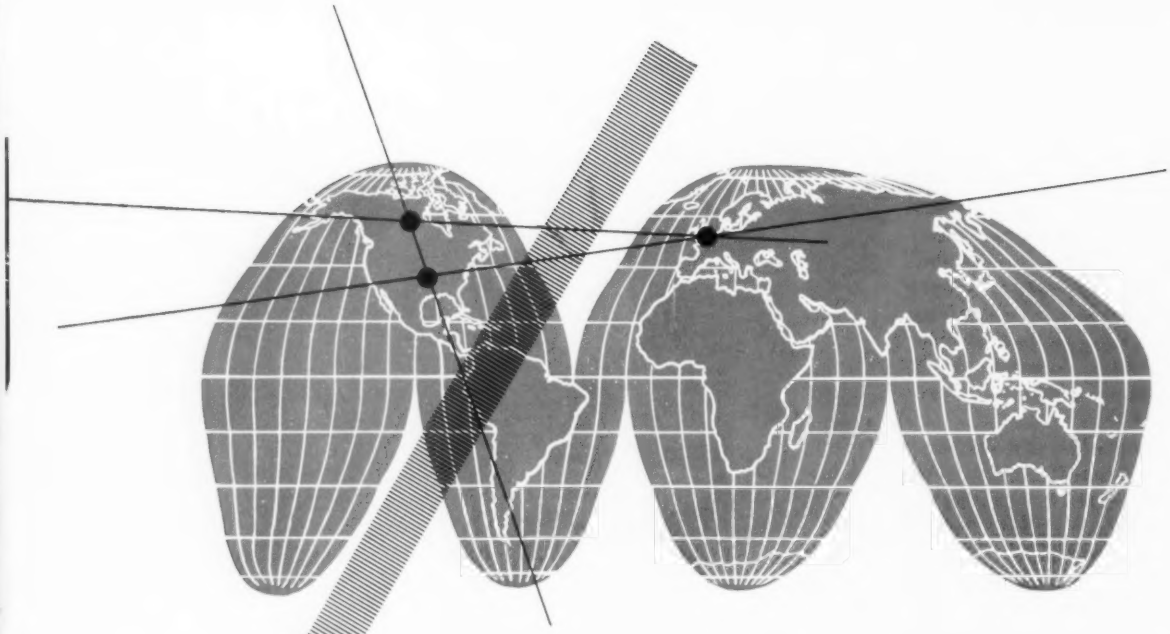
I have seen inspectors spend a whole day with their heads in garbage cans. If a cook puts a tin can in the paper barrel, does that make the mess hall unsatisfactory? To me, food preparation is the important function of mess personnel. Sanitation, collection of waste, record-keeping, and eyewash are certainly important in themselves, but they should not be placed so far out of perspective that the burning of beans isn't considered. See if the troops are getting good chow and plenty of it; then worry about the other things.

The summing up

I don't propose that we throw administration and garrison soldiering out the window, or that we wear helmets twenty-four hours a day. But let's emphasize the right things, and achieve a good balance that will pay the biggest dividends when the chips are down.

Unfortunately, we have reached the point where commanders are more concerned with minutiae than with their primary mission of teaching men to fight. To get us back on the ball I propose a re-evaluation of inspection systems and schedules. Make 'em unannounced; make them thorough; stop nit-picking; make sure inspectors know what they're doing; measure the combat effectiveness of a unit and not its whitewashing. Don't bother subordinate units with a lot of unnecessary, regulation-satisfying inspections. When you want a unit inspected send someone who knows what he's doing and what to look for. A meathead may get his head (and probably yours) in a grinder, so don't send a boy to do a man's job.

Let's consider the things that really count. We'll find that the real measure of a unit, its ability to fight, will improve immeasurably. After all, that's why we're in business.



Standardization Among Allies

A report on the philosophy and progress of the American-British-Canadian effort to achieve greater efficiency in combined operations

COLONEL J. S. LAWRANCE, JR.

COMBINED operations were common during World War II. Commanders, planners and logisticians met the problems that arose because differing types of matériel were used to perform the same function and because each army employed varying methods and procedures for similar operations.

In Korea, operations were even more complicated because Allied units were integrated to much lower command levels.

The experience of the British Commonwealth Division in Korea provides many examples of operating difficulties that can be attributed to lack of standardization. This division consisted of a Canadian brigade, two British brigades, and the usual divisional troops. The Canadian brigade was armed with 60mm and 81mm mortars, but the British brigades utilized 2-inch and 3-inch mortars. During the period 1951-53, the division occupied static positions with two brigades in line and one in reserve, and was required to maintain and stock munitions for two defensive lines. Brigades were rotated between the line and reserve. The Canadian positions, of course, were stocked with 81mm and 60mm mortar ammunition. Whenever the Canadians rotated, it was necessary to move their stockpile of mortar ammunition to the new location while the relieving British brigade was forced to do likewise. The handling and transportation required to effect these reliefs complicated the logistical support problem and represented wasted resources which industrial management would not tolerate for long.

In 1946, top-ranking officers of the United States and British armies decided that since the United States and

the United Kingdom intended to maintain close relations, it was common sense to assist this relationship by simplifying the conduct of combined operations by the two armies. Discussions between the two countries as to how this might be accomplished were culminated late in 1947 with the establishment of the American-British-Canadian (ABC) military standardization program.

Policy guidance for the standardization program, as promulgated by the Joint Chiefs of Staff, emphasizes that implementation of the program is decentralized to the three services, but charges each service with responsibility for coordinating with the others on standardization actions in which there is joint interest.

Aims of standardization

The aims of the ABC Army Standardization Program are twofold: to remove operational, matériel and technical obstacles to full cooperation among the three armies; and to realize the greatest possible economy in the use of combined resources and effort. We do not consider standardization as an end in itself. Unless cooperation will be significantly improved or an economic gain can be realized, standardization is not attempted. We cannot attain a complete degree of standardization on all matériel items or procedures. In fact, it has often been found that attempts to achieve "Chinese copies" result in a useless expenditure of time and effort and no standardization at all. A lesser degree of standardization is often a more practicable goal. For example, instead of concentrating on the development of near identical medium-gun tanks, efforts might be directed toward achieving agreement on a gun of the same caliber and interchangeable ammunition.

Principles governing program

The philosophic approach to an international standardization program is best illustrated by the principles by which it is governed. One of the more significant principles of the Tripartite Standardization Program is that it is voluntary. Although there is an agreement binding the three armies, none is compelled to agree to a standard or to join in collaboration and coordination leading to a possible standard. If the British and Canadians agree that they should adhere to a preference for tea at breakfast, the Americans are not required to stomach what the majority of messes in the U. S. Army choose to call tea! However, once a country has ratified a standard, it must conform unless released by agreement of the other armies or unless the item covered by the standard is replaced by a new development.

A second principle of importance is that all aspects of standardization and collaboration are based on reciprocity. This concept extends to the exchange of personnel, matériel, information, visits and use of facilities. Exchange on a *quid pro quo* basis is not feasible, but the policy does cover, for example, the loan of equipment by one army to another for testing purposes on a non-reimbursable basis even though the matériel loaned may be destroyed during the tests.

A third principle, and the keystone of the entire program, is that a full exchange of information and opinion between the armies is effected with a minimum of formal procedures. Within the limits of national policies, information on the status of all development projects and current doctrines and tactical concepts is made available to each army. This means that a considerable volume of U. S. classified information is disclosed to the United Kingdom and Canada, informally or formally, on a variety of subjects. Standardization would be virtually impossible without this exchange of information. Of course, each army has agreed to safeguard classified information received from the others in a manner comparable to that found in the orginating country.

Another principle of importance is that differences over standardization or collaboration are referred to higher levels for resolution as early as possible. In any international undertaking differences are certain to arise with considerable frequency at all levels. If left unresolved or "to work themselves out" (that nefarious substitute so often employed in lieu of action!) standardization would come to a standstill.

In addition, each army has agreed that it will make maximum use of existing agencies and procedures.

The ABC Army Standardization Program is not confined to hardware alone. The fields encompassed by the program are: non-matériel, matériel, and research and investigation. The non-matériel field covers operational, administrative and logistic procedures, tactical doctrine, organization and training. The matériel field, of course, includes weapons and equipment. No effort is made to standardize research, but collaboration in research in the interest of economic utilization of resources to overcome common problems is encouraged.

Non-matériel standardization

This field covers two principal areas:

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tactical doctrine, organization and training; and operational, administrative and logistics procedures. The collaboration and standardization in the first area is, of course, closely related to matériel standardization. However, the exact nature of this relationship has always been troublesome because it falls into the which-comes-first-the-chicken-or-the-egg category. Concepts concerning employment of weapons affect requirements and military characteristics for equipment, but on the other hand scientific progress or advances in the state of the art which can be translated into weapons often permit a revolutionary change in tactical concepts. The three armies have not been very successful in achieving agreement on broad concepts of organization and tactical doctrine.

Considerable time at tripartite user conferences is spent in discussing tactics and organization as they are related to the equipment under consideration. These discussions are beneficial, at least to the extent that each army is given the opportunity to test their ideas and so reassure themselves that they are sound and practical. On the other hand, these discussions may reveal that modifications of concepts are in order which may bring the doctrine of the three armies closer together.

In contrast to the nebulous progress made in the tactical and organization area, standardization in the operations, administrative and logistics procedures area has been impressive. In these areas standardization derives from studies which are made by the countries under monitorship of the Non-Matériel Committee. These studies begin as a result of a proposal by one of the armies that a certain area be investigated with a view to possible standardization. If the three armies agree to the scope of the proposed study, responsibility for its execution is given to a particular army. Scope is purposely limited as it has been found that there is a better chance of obtaining agreement within a reasonable time if the study is not too comprehensive in nature. Assignment of studies on operational and intelligence procedures is usually made to the U. S. Army, staff and administrative procedures to the United Kingdom, and logistic studies to Canada. Within the U. S. Army studies are usually assigned to one of the service schools or to the Command and General Staff College. The responsible army must coordinate closely with the other armies as the study progresses. The Non-Matériel Committee monitors the over-all progress being made and periodically a full-blown non-matériel tripartite conference is convened to attempt to resolve differences which prevent the completion of studies and the preparation of SOLOG agreements.

A SOLOG (Standardization of Operations and Logistics) agreement is actually a standard in the non-matériel field, ratified by the three armies. In our Army we normally include the provisions of the standard (SOLOG) in a field or technical manual.

Forty-two SOLOG agreements have been ratified and approximately sixty-eight studies are under way. The examples of some of the standards that have been adopted include:

¶ A common format for operations orders, intelligence summaries, periodic intelligence reports and operational situation reports.
¶ In the area of maps and map usage agreement has been reached on the concept that maps and charts used by forces acting together in the same area should be identical. Common grid-referencing systems and many common conventional signs, abbreviations and colors have been adopted in addition to symbols used on maps, air photos and overlays.
¶ A standard method of rendering patrol reports.
¶ Standardization of certain visual and sound signals.
¶ Systems for labelling field wire including the points to be labelled and the shape, material and marking of tags.
¶ Common policies and procedures governing certain aspects of troop movements.
¶ An *ABC Glossary of Military Terms* has been published.
¶ Standard methods of minefield laying and recording and marking of lanes through minefields have been adopted.

Matériel standardization

One of the most significant items on which standardization has been achieved to date is the 7.62mm small-arms cartridge. Although this round was finally adopted as a result of negotiations on the NATO level, the United States, the United Kingdom and Canada are included in the group of countries which have agreed to standardize on this cartridge. (France and Belgium are the other nations in the group.) The dimensional design of the cartridge, the accuracy from a prescribed barrel and the maximum chamber pressure have been fixed. The weight of the bullet varies between fixed minimum and maximum grains. Methods for proof and inspection are being prepared and will be fixed. Both commanders and logisticians benefit from this standardization, the former because they can conduct combat operations with assurance that the weapon used by each army will perform in approximately the same manner, the latter because the variety of small-arms ammunition they must produce and distribute is significantly reduced.

We must adopt a rational and realistic approach to matériel standardization. British and American manufacturing techniques differ considerably. Because of this difference identical equipments cannot always be produced without a far-reaching and expensive change. In many instances we can be sure of a close degree of exactness only if one country agrees to manufacture a standard equipment for all three armies.

National preferences are another factor preventing "Chinese copies" of equipment. Local methods of fabricating things lead to minor differences in equipment and are a reflection of national preferences with respect to the operation of equipment. National preferences can be real obstacles to progress in standardization.

In the ABC Army Standardization Program we recognize three degrees of standardization:

(1) Complete—which is defined as equipment that will conform to agreed military characteristics, be identical in so far as manufacturing techniques permit, and have interchangeable component parts and sub-assemblies.

(2) Functionally interchangeable—which is defined as the ability of matching items to perform the same function although the component parts and assemblies may not be interchangeable.

(3) Physically interchangeable—which is defined as the ability of matching items to meet the same physical requirements such as dimensions, air transportability, weight, and so on, although the component parts and subassemblies may not be interchangeable.

Experience has taught us that complete standardization is difficult to attain, except where one country develops an item for all three or provides

the other countries with an item under a foreign aid program. In most cases the degree of standardization of functionally interchangeable items is the most that can be achieved. This should by no means be considered a discouraging situation. For example, the United States and the United Kingdom have been unable to agree on the maximum permissible weight for medium-gun tanks. The UK desires a tank weighing more than the United States considers consistent with its requirement for mobility. In addition, United States and United Kingdom concepts as to tank design and functions differ to an extent that a complete degree of standardization on a medium-gun tank at this time is impossible. In recognition of these differences, the two countries could shift their efforts to the tank gun alone and attempt to achieve a common caliber and ammunition.

In matériel standardization we assign priority to combat equipment which will give us the greatest operational flexibility during operations, provide the most economical logistical support and permit maximum use of mutual production facilities. A fundamental concept of the matériel portion of the program is that success in standardization can best be achieved through coordination during the development of new matériel. It has been found that standardization of matériel which the cooperating countries have placed in production without prior coordination during development is seldom possible. Of course, this is not so where countries are induced to accept U. S. military standard items under a reimbursable or non-reimbursable aid program. In some cases standardization is a by-product of foreign aid.

By 30 June 1956 about 150 agreements reflecting varying degrees of matériel standardization had been either ratified or were waiting formal ratification by the three armies. In the majority of cases these are bilateral agreements between the armies of the United States and Canada, or Canada and the United Kingdom. The low number of tripartite agreements is a reflection of some of the obstructing factors mentioned above and the relatively short period of time the program has been in existence. It must be remembered that in the United States Army we seldom realize a usable end item from research and development in under seven years. Many projects on the books at the time the program began were too far along for standardization action.

Nevertheless, some of the standardization achieved represents noteworthy progress. Canada has adopted the complete family of U. S. Army standard 155mm howitzers and guns, towed and self-propelled. She is producing 155mm howitzer ammunition and the towed 155mm howitzer. The United Kingdom has adopted the 155mm towed howitzer, M1A1, the 155mm SP howitzer, M44, and the Corporal missile. The British have placed quantity procurement orders for the Corporal with U. S. manufacturers.

In the infantry area Canada and the United Kingdom have accepted and are manufacturing the Belgian-developed FN rifle and a cartridge based on the U.S.-developed M59 7.62mm round. A U. S. Army decision concerning the adoption of a new rifle is expected before the year is out. All three armies now use the 3.5-inch rocket launcher and the M35 series rockets as a platoon antitank weapon. The M26 hand grenade has been adopted by the Canadian Army, and United Kingdom acceptance of the grenade is anticipated as soon as a newly developed fuze has been completed.

The British and Canadian armies are armed with the British Centurion tank, Mark 3 and 5, but the Canadians have also accepted the U. S. Army's M48 medium-gun tank as substitute standard and the U. S. Army's M41A1 light-gun tank as standard. The 106mm recoilless rifle, M40, BAT weapon has been adopted by Canada and is under procurement from the United States.

This has been a limited rundown of the combat equipment which has been adopted for common use or as functionally interchangeable by the three armies. The complete list is replete with signal, engineer and quartermaster items whose adoption by one or more of the armies means that combined operations will be simplified to an immeasurable extent.

It is obvious that much remains to be done before we can say that the program has achieved its objectives. To be realistic one must realize that merely because three armies had signed an agreement to standardize there was no assurance that really significant progress would be made immediately. Because of our differing ways of doing things, and above all because of the differing meanings we assign to words, the initial years of the program were almost exclusively taken up with efforts to settle controversies and interpret the agreement we had ratified. That phase is about completed.

Canada, perhaps, has done more than any other country to moderate and compromise controversies. For these services the program owes Canada a tremendous debt. This eagerness to prevent the program from bogging down in a morass of really inconsequential disputes and to recommend areas on which standardization should be concentrated is indicative of the intense interest which Canada has always manifested in standardization. Of course, it is also a reflection of Canada's small defense budget and her realization that a large portion of her military equipment must be developed by the United Kingdom or the United States.

It is not easy for strong partners, who in the past have with considerable pride developed and produced their arms independently, to acknowledge the need for and practice collaboration. The action of the United Kingdom is reversing its original decision to adopt a British-developed rifle and round in favor of a Belgian rifle and a U. S. round was not only politically courageous, but an unparalleled demonstration of the British intention to encourage allied standardization.

Standardization is still inhibited by local prejudices and the attitude that weapons invented and developed in a foreign land are bound to be inferior to weapons produced domestically. Although division of responsibility for specific developments is specifically encouraged by the Basic Standardization Agreement, in practice this principle has been found almost impossible to implement because of the parochial attitude toward foreign developments and because on the very few occasions when the share-the-work-load principle was tried the dependent army found that the developing army did not prosecute development of the equipment in question with the priority or emphasis that the dependent army would have assigned to the project. In these days of reduced defense budgets no country can afford to assume that it has a monopoly of scientific talent and resources. We should begin now to discard our prejudices and illogical objections and depend more on our allies. An ally can be a source as well as a recipient of assistance.

From TRAINFIRE I to TRAINFIRE II

LIEUTENANT COLONEL E. S. SANDERS

as told to H. J. BURKERT, Jr.

FACING up to a demonstrated lack of proficiency in combat firing during the Korean fighting, the Army cast a critical eye on its marksmanship program. A recent result of this research is the new system of individual rifle marksmanship training popularly known as TRAINFIRE I. This was developed through research conducted by U. S. Army Infantry Human Research Unit, a combined military-civilian team at Fort Benning, an agency of Headquarters, U. S. Continental Army Command.

Task TRAINFIRE embraced the experimental development of training methods and proficiency tests for improving the effectiveness of combat riflemen. It consists of four sub-tasks: (1) development of an experimental course of individual marksmanship; (2) an experimental program of day technique of rifle fire and squad tactical training; (3) development of a program of squad sniper training for selected riflemen; and (4) development of a training program for the sniper specialist.

Guiding the research of the Infantry HRU were certain underlying principles: (1) determine what is required of combat riflemen; (2) incorporate in training only those aspects which will better equip the rifleman to meet the demands of combat; and (3) build test situations which simulate as closely as possible actual combat conditions, restricted only by requirements of safety and performance measurement.

It was under these principles that TRAINFIRE I evolved. Briefly, TRAINFIRE I had the trainee fire early in training; combined preliminary rifle instruction with 1,000-inch firing; employed the 1,000-inch range to teach marksmanship principles; emphasized target detection training and included firing at pop-up targets from both supported and unsupported positions.

The second step

TRAINFIRE II represents a logical progression from individual to small-unit marksmanship training. It was designed to replace the thirty-two hours allocated to "Technique of Fire and Squad Tactics" in the current Army Training Program. Its purpose was to investigate and measure the problems and techniques involved in both technique of fire and squad tactical training. Training methods for those phases of combat firing not covered in sufficient detail in existing training doctrine were to be designed and developed. TRAINFIRE II also was to improve means and procedures for a realistic test of the combat firing ef-

One of several new hand signals used in TRAINFIRE II. It means "No" or "stay where you are"

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The Flexible Wedge, only new squad formation used in TRAINFIRE II, can vary in depth, width and length all the way from "squad column" to "as skirmishers"

Aiming rack devised to teach target detection. Assistant instructors check and record each four target series spotted by the trainee. Later targets are recorded by the trainee on a form using a terrain reference aiming point, similar to actual combat firing

ficiency of small groups similar to the rifle squad. In the conduct of the research, 220 inductees, assigned to TRAINFIRE for eight weeks of basic training, were randomly divided in two—an experimental group and a control group. During the first four weeks the experimental group received experimental marksmanship instruction (TRAINFIRE I), while the control group received conventional marksmanship training. The same procedure was followed in the second four weeks: experimental group, experimental training (TRAINFIRE II); and control group, conventional firing.

At the end of the second four weeks, both groups were given proficiency tests in squad in day defense, squad in day attack and squad on day combat

patrol. Tests were conducted on firing ranges designed to simulate combat conditions and still allow for safety and performance measurement.

Proof of the pudding

In the defense test problem *the poorest experimental squad had a higher total score than the best control squad.* In the attack problem test, researchers found that the experimentals averaged *50 per cent hits* while the controls averaged only *21 per cent hits.* In the combat patrol problem the squads were tested for ability in shifting fire to engage new surprise targets while maintaining properly distributed fire over the initial targets. The average experimental squad had *15 per cent more hits* than the average control squad.

On the basis of these tests it was concluded that the experimental programs of TRAINFIRE I and TRAINFIRE II *better* prepared the rifle squad for day defense, attack and combat patrol than conventional methods did.

Squad tactics include movement of the squad in closing with the enemy and consequently require training in use of ground and cover, signals, formations and prearranged battle drills. Squad technique of fire involves teamwork in group initiation, cessation, distribution, accuracy and rate of fire. It also includes the ability to mark, by location of a feasible aiming point, hidden targets detectable only by such fleeting indications as smoke, dust, flash and sound.

ABC of the program

In developing the experimental program Infantry HRU first undertook an extensive survey of relevant training literature on present doctrine. Combat literature was surveyed to determine the extent to which current doctrine was used in combat.

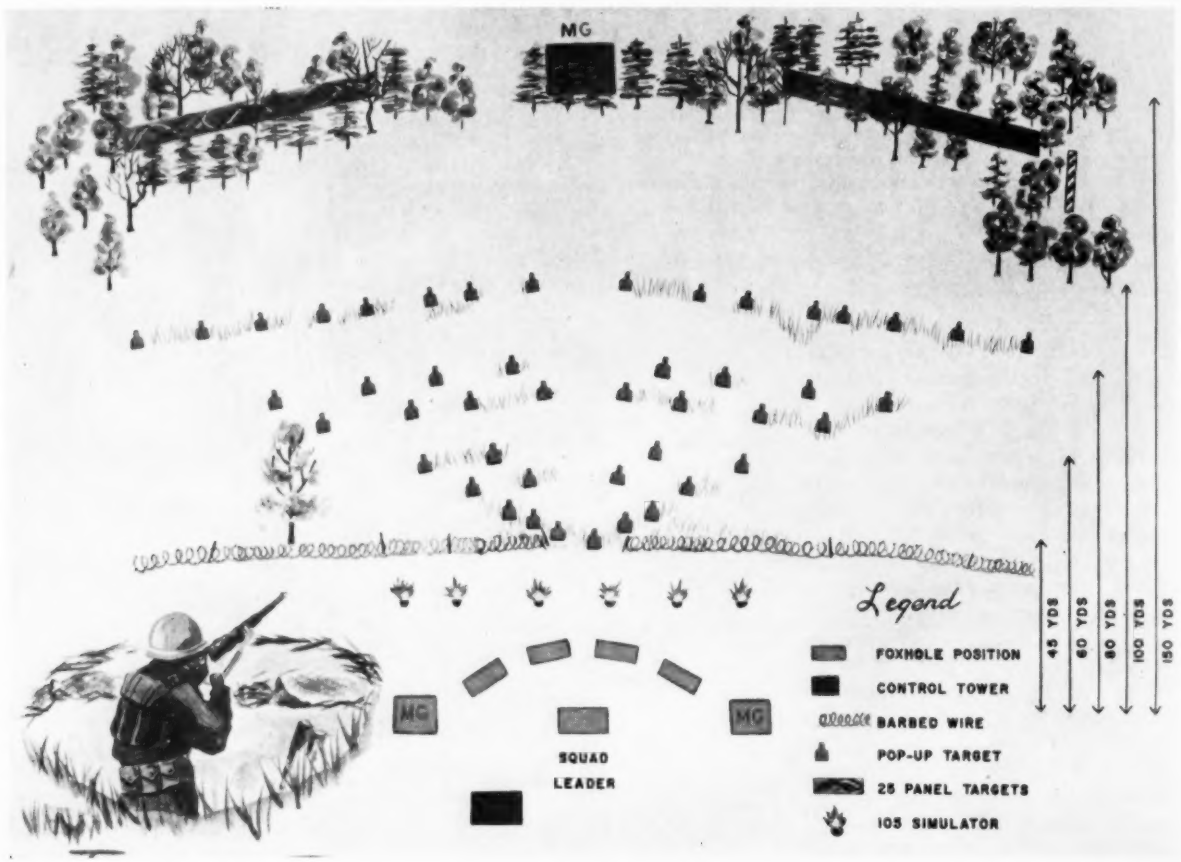
Secondly, a questionnaire analysis to evaluate techniques employed in carrying out the doctrine was sent out. Comments from The Infantry School, the 3d Infantry Division, and the Infantry Section of Headquarters CONARC were contributed concerning tactics proposed by the TRAINFIRE II research team and tactical procedures presently prescribed for the rifle squad.

Several new combat hand-and-arm signals, a new squad formation and several new tactics for the squad in defense were devised. On the basis of the literature survey, questionnaire and preliminary field research, the following premises were formulated and presented in the technical report.

Most combat targets consist of a number of men or objects in an irregular line and using cover such as ground folds, hedges and borders of woods or ditches. The indications given by such targets are usually fleeting and consist of such clues as smoke, flash, noise, dust or movement. Enemy personnel targets are rarely visible except in a close assault. The range of the rifleman's battle targets rarely will exceed 300 yards.

The use of supported firing posi-

Defense test range used in TRAINFIRE II shown schematically. Possible positions for targets, panels, simulators, and controls are shown

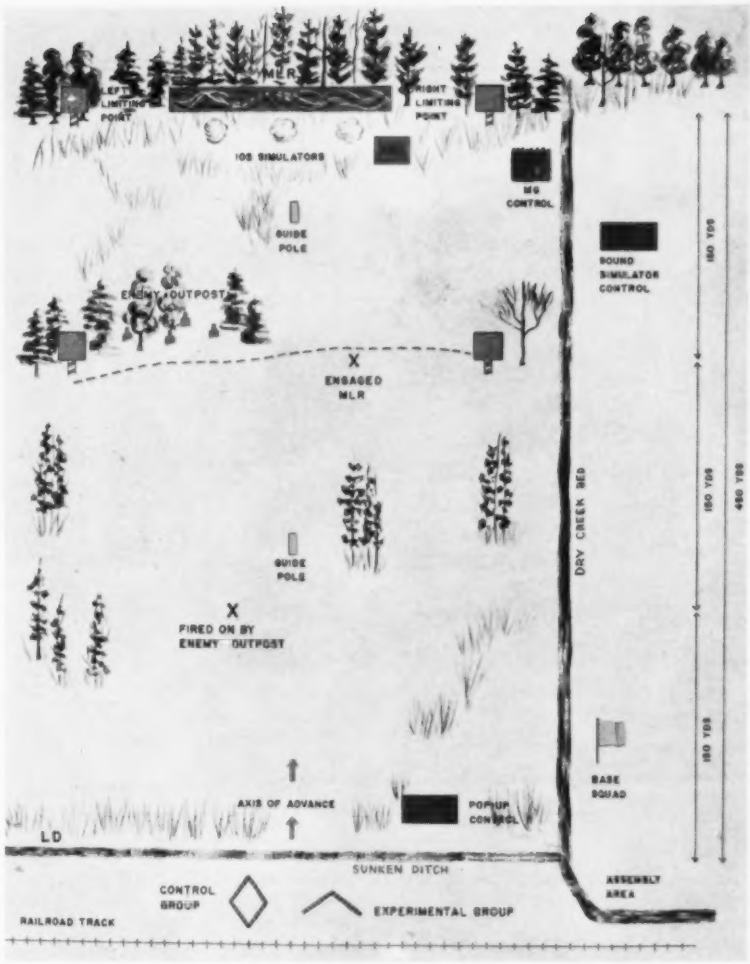


tions whenever possible is preferred because of the target's nature and the terrain on which it is encountered. An accurate aiming point is difficult to select because of the low outline and obscurity of battlefield targets. There are a number of problems involved peculiar to fire control and fire distribution of the rifle squad.

One major problem is that squad fire distribution in certain emergencies must be initiated and sustained without direction of the squad leader. The visual and oral target designation procedures currently available are inadequate. . . . Target detection and subsequent placing of fire upon indistinct or unseen targets cannot be profitably taught using landscape targets.

Fire direction in terms of "front," "right front," "left front" and so on, are unnecessarily difficult to teach in view of the availability of the familiar horizontal angles given in terms of hours: 12 o'clock, 3 o'clock, 10 o'clock, and so forth, already used in much of our military training. . . .

Factors affecting technique of rifle fire were considered in these premises: effective engagement of targets depends upon proper fire control by the squad leader; small-arms fire is relatively more important in the defense than in the offense; logistical considerations require that ammunition, particularly in the offense, always be utilized economically, and the differences in day and night techniques must be kept to a minimum.



Schematic view of attack test range used in TRAINFIRE II

Analysis approved

The validity of these premises was approved by The Infantry School in July 1955 and an experimental training program was then constructed by Infantry HRU. It provided combat realism in the firing exercises; a scoring system to measure effectiveness of the squad's fire (which also provided the squad with immediate knowledge of its test performance); and "battle drills" or SOPs to cover more situations than those covered in the conventional program. The experimental and conventional programs were then subjected to comparison tests.

In the conventional course, during the second four weeks of squad training, trainees fire blanks or fire live ammunition on targets which cannot be scored. There are two exceptions to this: landscape-target firing and field-target firing.

The landscape two-dimensional target provides an obviously unconvincing picture of combat terrain. One inaccuracy is that the right front and flank and left front and flank used in the fire commands are all to the immediate front of the firer.

Field-target firing is operated by pit details. A variety of targets is presented to the squad arranged along this firing line. A stationary silhouette is usually held by the pit operator; movable targets are provided by fastening E or F targets to sleds or by suspending such targets from a trolley on an overhead wire. This range lacks combat realism for several reasons: overemphasis on safety, mounds for pit protection, range cleared of natural cover, and simulation of enemy fire provided by firecrackers and machine guns fired from pits.

The loss of training time using pit-operated targets has been estimated at ten training man-hours per problem.

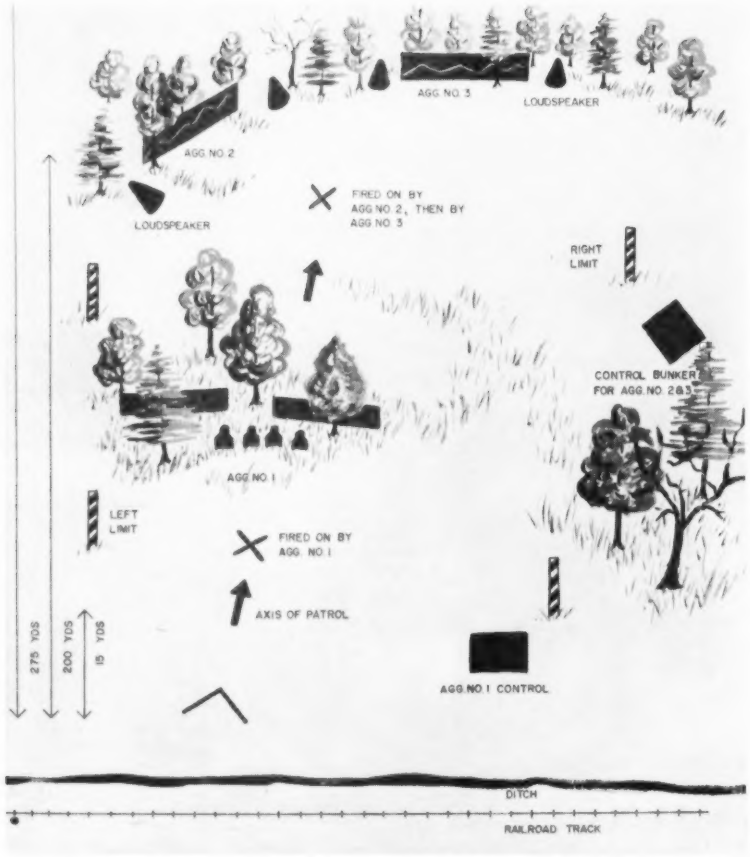
Program live-fire

The experimental program was divided into eight periods. Most periods consisted of a minimum length conference, demonstration, practical exercises, ball or blank firing and critique. The 110-man experimental group's instruction totalled thirty-three hours, expending 232 rounds of ball and 112 rounds of blank ammunition. The 110-man control group's conventional instruction also totalled thirty-three hours of instruction, firing 152 rounds of ball and 104 rounds of blank ammunition.

The first experimental period was a one-hour orientation on the role of the rifle squad in combat, demonstration of the table of organization and equipment, outline of the course, and rules of safety.

The second period, formations and signals, devoted two hours to squad column, diamond and wedge formations, and hand-and-arm signals.

The third period, of four hours, was



Schematic view of patrol test range used in TRAINFIRE II

SOPs for squad in defense and in offense. It was used to explain the double-box of the defense, foxhole positions, movement into positions, areas of search and sectors of fire in defense. Attack instruction included box of attack, attack order, movement from assembly area to the attack position and across the line of departure, areas of search, sectors of fire, and reorganization on the objective.

In the fourth period, four hours were devoted to squad in offense, defense, assault and technique of fire distribution. Instruction also included a blank-firing problem with offensive and defensive squads opposed, assault firing practice with blank and ball ammunition, and firing practice in distribution of fire.

The fifth period of four hours' duration was a continuation of the fourth.

The sixth period was squad in defense and in offense and consisted of ball-firing problems.

The seventh and eighth periods had six and four hours of instruction, respectively. Technique of fire distribution was taught, including SOPs for squad on combat patrol, and a blank-firing patrol problem. A live-firing problem with squad on combat patrol consumed the eighth period.

Program "What Do I Do Now?"

By comparison, the conventional program is characterized by instruction in what the soldier is expected to do, and to a lesser extent by SOPs which tell him how he is going to do it. The TRAINFIRE II program added SOPs for many more situations than those covered in the conventional program and also extended conventional training SOPs to finer detail. Concentration on SOPs resulted in a reduction in generalized oral instruction. SOPs were standardized insofar as possible to facilitate the squad leader's control and efficiency in directing his men.

In the experimental program, practical exercises were emphasized. The use of realistic targets at combat ranges and under field conditions replaced less realistic conventional training such as the 1,000-inch landscape firing, and white or yellow silhouettes. Automatic scoring in live-firing exercises enabled immediate evaluation of the squad's performance.

The final test

When the experimental and control groups had completed their respective marksmanship training, they were tested on three proficiency problems: defense, attack, and combat patrol. None of the trainees had ever seen the test ranges before. Infantry HRU personnel made the problems simple, since trainees had only four weeks of individual marksmanship instruction and thirty-three hours of group training. Problems also were as realistic as possible, tactically sound, and involved simulations of combat noises, enemy movement, and other battlefield clues. Safety, time element, ammunition expended and measurement requirements were considered.

Defense range

The defense range was designed to compare the proficiency of the two groups in a prepared defense. Two-man standing foxhole positions were constructed and placed so that squad members could observe their assigned areas and be controlled by the squad leader. Plywood panel targets (three by four feet) were placed along the edge of a woodline some two hundred yards from the defense position. Hidden Aggressor forces were represented by twenty-five panels on the right and twenty-five on the left. Each panel was camouflaged with paint and natural foliage, and on each was an electro-mechanical counter, designed to record hits on the panel.

To simulate Aggressor activity, electro-mechanical bush-wigglers were placed along the line of targets to create a definite movement of small bushes and shrubs, as would be effected by muzzle blast and bodily movement of troops. Banks of pop-up targets were placed in staggered fashion over the range. The olive-drab pop-up (Punchy Pete) silhouettes were located so that natural foliage was undisturbed except for trimming where it completely obscured the target.

In the test the defense position used was that of an interior front-line squad in a prepared position. The position was constructed in advance and the problem was drawn to require the test-

ed squad to relieve a represented squad in position. The situation thus involved the occupation of the position and rapid familiarization with the sector of fire, likely targets, location of adjacent squads and the other elements involved in a defense.

Each man was given sixty-four rounds of ammunition. The squad then moved into the foxhole positions, and the defense order was pointed out on the ground with the squad leader marking the right and left limits of the defense sector with strikes of ball ammunition.

The enemy attack began with Aggressor machine guns opening fire, returned by friendly machine guns. Enemy TOT fired, represented by a quick volley of three 105 simulators. After a silent period, enemy TOT was fired again, followed by Aggressor rifle fire from the woodline along the row of camouflaged panels. The crack-thump of rifle fire was simulated by tape recordings of actual rifle fire.

As the hostile riflemen opened fire, the test-squad leader alerted his squad, which commenced firing at the target detection cues in the woodline. Aggressor riflemen then came into the open, represented by pop-up silhouette targets. One hundred eighteen targets appeared in an approaching order for varying intervals of time. First, at 100 yards, four banks, each with four targets, were presented three times. Second, at 80 yards, four banks, each with four targets, were presented three times. Third, at 60 yards, two banks of four targets appeared twice. Fourth, at 40 yards, there was one bank of six targets. These last targets appeared for one six-second exposure and simulated the enemy's attempt to break through a barbed-wire defense. The problem lasted two and one-half minutes from the initiation of Aggressor machine-gun fire to the final appearance of 40-yard targets.

Results of this test were that the experimental squads outshot and outscored the conventional squads. TRAINFIRE squads averaged 41 per cent hits while the conventionals averaged only 21 per cent.

Attack range

The attack-test range was built to simulate as closely as possible a combat situation which might be encountered by a rifle squad as part of a large force in the attack. The advance extended some four hundred yards from a line of departure along a wooded ditch.

An Aggressor security outpost, four pop-up targets, was located in a small clump of trees on the left front (11 o'clock). These targets were used to give the squad clues to enemy location. Main line of enemy resistance was located on the edge of a treeline about five hundred yards from the LD and consisted of a line of twenty-five camouflaged panels with several pop-up targets and machine guns located to their front.

Each man was allotted thirty-two rounds of ammunition, and the attack order was given in the squad assembly area. On the LD, the attack order was pointed out on the actual terrain. The squad leader moved his unit along the axis of advance. When the squad had moved about seventy-five yards, the Aggressor outpost opened fire at a distance of 150 yards. Fire was simulated by the crack-thump simulator. The squad leader ordered his men to take cover and, where the squad position was short of the firing position marked by tape (for safety reasons), he moved the squad forward and then gave fire orders. The four pop-up targets provided detection clues by being raised and lowered every five seconds during the thirty-second firing sequence.

At the end of this time, the squad moved forward again. Some 150 yards from the MLR, Aggressor machine guns opened fire on the squad. Again the men took cover, and the leader moved his men to firing positions marked by tape. He then radioed for supporting fire. Aerial tree-bursts over the enemy were effected by 105 simulators. Riflemen opened fire on order from their leader. Target detection clues were provided by sound simulators and bush-wigglers. The problem ended when all ammunition was fired.

Test results indicated that on the average the experimental squads had more than twice as many hits as did conventional.

Combat patrol

In the final test, the problem involved trainees moving a considerable distance in squad formation with loaded weapons. In constructing the range, special care was taken since surprise targets which were not directly to the "front" presented more of a danger problem when fire was being initiated. The safety problem had to be solved without sacrificing realism.

An Aggressor outpost of four pop-up targets was located on the forward slope of a small hill, seventy-five yards from the jump-off point. Two panels were placed behind each pop-up target to record hits. The main enemy force was located two hundred yards farther on, represented by fifty panels in two 25-panel sections. Paint and foliage provided camouflage.

After each trainee was given forty rounds of ammunition, the patrol moved out. It was fired upon by the Aggressor outpost seventy-five yards to its left. The men hit the dirt, moved to safe firing positions, and opened fire on command from the squad leader. Aggressor fire lasted only fifteen seconds.

Then the assistant squad leader, with three men, moved forward to investigate the hill. Upon signal that it was clear, the squad leader moved up the remainder of the squad and regrouped. The squad continued on patrol.

A second Aggressor opened fire from the left front at a range of one hundred yards. Again the squad took cover and moved to safety firing positions. The squad leader marked flanks of the Aggressor force by strike of live ammo and ordered an "open fire." After thirty seconds, a third Aggressor engaged the patrol from the right front, necessitating division of fire. After marking the flanks of the new target, the squad leader divided his unit's fire to cover both Aggressors. Once ammunition was consumed, the problem ended.

A major part of this test involved the ability of squads to shift fire from Aggressor 2 to Aggressor 3. While the average difference between the experimental and control squads was not marked for Aggressor 2, the experimentals obtained considerably more hits upon Aggressor 3. This difference reflected a superiority of TRAINFIRE II squads in shifting fire.

The pudding proved again

As an over-all result of these three tests, Colonel Sanders said:

"Squads trained in the experimental program were consistently superior in performance to the conventionally trained squads in both number and distribution of hits on targets on all three proficiency test ranges.

"We used battle drills effectively in all experimental training—with the fire team, in teaching techniques of fire, in teaching the sequence for squad de-

(Continued on page 62)

COORDINATION AND

MUSCULAR MOVEMENT IN THE HEDGEROWS

If intercommunication between events in front and ideas behind are not maintained, then two battles will be fought—a mythical headquarters battle and an actual front-line one, in which case the real enemy is to be found in our own headquarters.—Major General J. F. C. Fuller

CAPTAIN MARTIN BLUMENSON

WEBSTER defines coordination as "a combination [of factors] in suitable relation or so as to give harmonious results; functioning of parts in cooperation and normal sequence; as *coordination* of muscular movement."

The last part of the definition is particularly apt in a military frame of reference. Much has been said about coordination and its importance in the art of war. Yet it is a term that is hard to pin down.

The exact meaning of coordination may best be illustrated by means of an example where little coordination existed. The story is embarrassing and discomforting, for the events added up to confusion on the battlefield. Yet the story is instructive as a practical example of what can happen when coordination is absent up and down the chain of command. In this instance, the muscular movement that resulted was disjointed. Poorly regulated, it became incoherent.

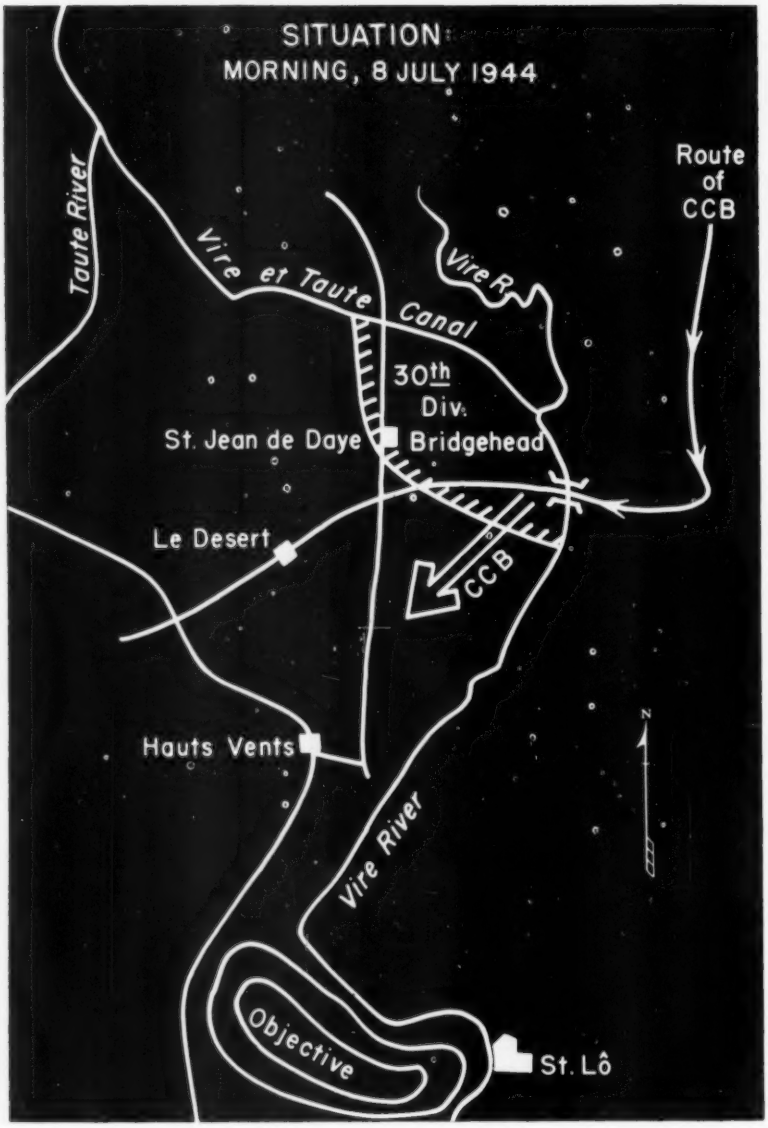
Captain Martin Blumenson, USAR, presently Historian of Joint Task Force 7, wrote *Breakout and Pursuit* (the account of the Battle of France), a forthcoming volume in the Army's official history of World War II, while on duty in the Office of the Chief of Military History. He earned his Master's degree at Harvard, and was Historical Officer for Third and Seventh Armies and later for ETO, during the Second World War. He contributed "MacArthur's Divided Command" to our November issue.

Bridgehead established

It occurred in the hedgerow country of Normandy, and it began on 7 July 1944 when U. S. First Army was in the fifth day of an attack. Two corps were meeting strong resistance and were drawing German strength into their zones of advance. When the third corps, XIX, broadened the army attack that morning and committed the 30th Division to secure a bridgehead over the Vire River and the Vire-et-Taute Canal, relatively few Germans were in opposition. The 30th Division crossed the river and the canal, seized a bridgehead, and made evident to American commanders the existence of this soft spot in the German defenses. Lieutenant General Omar N. Bradley, First Army commander, acted at once. He took the 3d Armored Division out of army reserve and made it available to XIX Corps for commitment into the bridgehead.

Exactly what General Bradley had in mind was not clear. Whether he visualized the commitment of armor as being motivated primarily by offensive or defensive intent, he did not say.

Since General Bradley had an offensive mission, and since his other engaged elements had not achieved much forward momentum, the commitment of armor could be interpreted as the insertion of a slashing spearhead to exploit the penetration that the Taute-



et-Vire bridgehead represented.

On the other hand, General Bradley correctly figured that the Germans would move troops to the Taute-et-Vire area and counterattack to restore the original line. Part of the 2d SS Panzer Division and a mobile brigade of light infantry were already closing in from the flanks to plug the gap until the powerful Panzer Lehr Division, ordered from another sector, could counterattack to eliminate the American bridgehead. Since General Bradley could not know how fast the Germans could act, he could have intended to use the 3d Armored Division to bolster the defensive strength of the bridgehead forces.

General Bradley did not state specifically what he desired because, in conformance with well-established doctrine based on custom and tradition, a commander does not dictate the details of a commitment. So he simply instructed the XIX Corps commander, Major General Charles H. Corlett, to support the 30th Division by reinforcing the infantry with armor.

The Corps objective

General Corlett's mission was to seize high ground about seven miles to the south. By taking this high ground immediately west of St. Lô, he would facilitate the capture of that town—an operation his corps was scheduled to get under way within a few days. Thus, General Corlett anticipated a limited exploitation of the bridgehead.

Unfortunately, General Corlett was severely ill and confined to bed at his command post. Though he had been expecting to receive the 3d Armored Division to exploit the success of the 30th Division, he had been unable to work out the details of the commitment with the armored division commander, Major General Leroy H. Watson. Nor was he able to supervise personally the actual passage of the armored troops across the river, into the bridgehead, and through the infantry positions.

General Corlett telephoned General Watson in the afternoon of 7 July and told him to cross the Vire River immediately and drive south.

"How far do you want me to go?" General Watson asked.

"The Germans have little or nothing over there," General Corlett replied. "Just keep going."

Confusion between commanders

At the very beginning of the action, then, there was a basis for misunderstanding. The army commander visualized a build-up of the bridgehead forces. The corps commander anticipated a limited exploitation of seven miles. The armored division commander understood that he was to make an unlimited drive to the south.

Ready in general for commitment anywhere along the army front, General Watson was surprised by his sudden attachment to XIX Corps. He had received no advance information alerting him specifically to that event. He had not discussed with General Corlett such arrangements as the actual force to be committed, the coordination of artillery fires, the construction of additional bridges, the passage of his troops through the 30th Division, and subsequent routes of advance. Nor had he conferred on these matters with the 30th Division commander. Guessing that the corps commander intended to commit the entire armored division, which happened actually to be the case, General Watson ordered the commander of Combat Command B, Brigadier General John J. Bohn, to make the initial entry into the bridgehead.

Several days earlier, trying to prepare for any likely eventuality, General Bohn's staff had submitted to division headquarters plans of action based on several possible commitments. The premise of one of these plans was exactly the situation that occurred. Unfortunately, division headquarters had scrapped that plan in the belief that such a development was improbable, and was less prepared to implement the actual situation than other nonexistent ones.

Alerted for movement at 1615 hours on 7 July, General Bohn asked permission to phone the 30th Division to coordinate his river crossing with the infantry. He had had communications wire laid from CCB's assembly area to the 30th Division's headquarters in anticipation of such an emergency, but the armored division's chief of staff assured General Bohn that direct communication between CCB and the 30th Division was unnecessary. Since CCB would remain under control of the 3d Armored Division, the chief of staff himself would take care of any necessary coordination. Little, if any, coordination actually took place between the 3d Armored and the 30th Infantry Divisions. There was simply no time.

Two hours later, General Bohn received his march order. He led his troops toward the river five miles away. Commanding inexperienced troops who were moving toward their first combat action, and maintaining radio silence and blackout discipline, General Bohn could use only one road to get to the river. That road was narrow, rain-soaked, and jammed with other traffic. Furthermore, the combat command was larger and more unwieldy than those of the triangularized armored divisions that recently had been reorganized. The 3d Armored Division was an "old-type" unit, with two combat commands rather than three, 232 medium tanks instead of 168, and numbering, with its attached units, more than 16,000 rather than about 12,000 men. General Bohn's CCB contained more than 6,000 men, 800 vehicles and 300 trailers, a column over twenty miles long.

Delay at the river

At the river-crossing site, where rain fell steadily and enemy fire fell intermittently, General Bohn found only one bridge available. The 30th Division had constructed a ponton structure and a floating treadway and had repaired an existing stone bridge; but enemy fire had knocked out the ponton installation, and the treadway was being used for traffic coming out of the bridgehead. General Bohn had to share the stone bridge with the 30th Division, which was moving an infantry battalion across the river. With vehicles of both commands intermingled and with traffic periodically retarded by the enemy artillery fire, CCB did not get all its forces across the river until late in the morning of the following day.

Across the river, CCB had to find lodgment during the hours of rainy darkness in a small area crowded with 30th Division troops and closely hemmed in by an active enemy—this without prior reconnaissance or coordination with the 30th Division.

As soon as the 30th Division's commander, Major General Leland S. Hobbs, had learned that CCB was to enter the bridgehead, he ordered his troops to clear the main road west of the river-crossing site and to give the armor the right of way. He envisioned CCB advancing westward to the St. Jean-de-Daye intersection and there turning left to drive southward along a good highway to the corps' objective. (*See sketch.*) Such action would (1) capture the St. Jean-de-Daye crossroads, the objective the 30th Division needed but had not taken to make the bridgehead secure; and (2) provide the infantry division with an armored spearhead for the attack to the high ground west of St. Lô. Though this operation might have been feasible, General Hobbs did not have operational control of CCB.

Control rested with General Watson, who was concerned by the fact that the enemy still held the St. Jean-de-Daye intersection. To take the crossroads and turn left there would expose CCB's right flank during its drive to the south. Minimum protection would necessitate going two miles straight on and capturing the village of Le Desert. Despite the seeming absence of strong enemy forces nearby, General Watson felt that an attack to secure the crossroads and Le Desert might involve CCB in a task that would delay and perhaps prevent its movement to the south. He therefore directed General Bohn to bypass the intersection by turning left and moving southwest immediately after crossing the river. This committed CCB to an advance over a network of unimproved roads and trails for a distance of from four to six miles. CCB would then emerge on the good highway three miles south of St. Jean-de-Daye and be ready to drive rapidly southward to the corps' objective.

Sending armor over secondary roads or across country for a short distance to bypass resistance was not unusual, and General Watson did not think that CCB would be unduly delayed by the terrain. Since the ground was presumed but lightly held by the enemy, he did not believe there was much risk of getting the tanks involved in the hedgerow tactics of fighting from one field to the next. He felt that the potential complications of pointing CCB diagonally across the zones of two regiments of the 30th Division would be minor. And finally, the relatively slight experience of armor in Normandy seemed to indicate that rapid advance along the narrow main highways was a rash procedure in view of the effectiveness of enemy antitank weapons.

The armor attacks

General Bohn launched his attack on the morning of 8 July. He had a narrow front of about a thousand yards. So he advanced in a column of reinforced tank battalions. While most of CCB remained in the rear, the leading battalion deployed into two parallel columns and began to move along country roads and hedgerowed lanes.

Almost at once this force met and destroyed five German tanks, as against the loss of one—an auspicious opening. But the tankers soon became involved in the torturous advance typical of combat in the hedgerow country. The roads were little better than trails, narrow, sunken in many places, and frequently blocked by fallen trees, overhanging hedges, or wrecked vehicles. The poorly surfaced alleys, already soft as a result of a month's heavy rainfall, could not withstand the weight of the Shermans and quickly became quagmires. In order to keep the parallel columns moving on a front more than one tank wide and prevent a single stalled vehicle from halting an entire column, the armor overflowed the lanes and entered the fields of the swampy Cotentin lowland. Here the mud was much worse. Furthermore, the hedgerows blocked progress and necessitated extensive breaching by demolition and bulldozer. By the end of the day, CCB had advanced only a mile and a half.

Thoroughly disappointed, General Watson informed General Bohn that such progress was unsatisfactory. He urged General Bohn to fit his method of advance to the situation, emphasized the need for speed, and insisted that he use the roads wherever possible.

Bridgehead traffic jam

General Bohn was in agreement, but had been unable to devote much attention to his front. He had been busy in the rear area trying to straighten out the confusion that was throttling an orderly organization of the bridgehead

forces. In an area scarcely four miles wide and less than three miles deep were jammed seven infantry battalions, a tank battalion, and an artillery battalion of the 30th Division; an infantry battalion, three tank battalions, and two artillery battalions of CCB (a force of approximately 11,000 men); and an almost equal number of supporting troops of both units. In this overpopulated morass of mud, tank treads destroyed communications wire and the presence of armor in infantry regimental rear areas hampered supply operations. Infantrymen were surprised by the appearance of CCB tanks, and tankers were indignant to find riflemen occupying possible assembly areas. Both commands were in their initial combat action and nervous soldiers of both units aggravated conditions by firing weapons wildly in rear areas and on the flanks. Artillery units had not coordinated their fires, and in the absence of communications between the armor and the infantry, the artillery in support of one hesitated to fire for fear of shelling the other.

Representatives of both commands conferred that afternoon in an attempt to coordinate the effort in the bridgehead. But by this time CCA of the 3d Armored Division was crossing the river into the bridgehead to drive westward beyond the St. Jean-de-Daye intersection, secure Le Desert and protect CCB's flank and rear. Simultaneously, the corps commander, General Corlett, released an infantry battalion of the 30th Division from corps reserve, and the division commander, General Hobbs, brought these troops south across the Vire-et-Taute Canal and into the bridgehead for additional right-flank protection. The infantry battalion and CCA met at the St. Jean-de-Daye intersection and compounded the confusion.

In the hope of ameliorating the situation in the bridgehead, General Corlett applied the principle of unity of command. He attached CCB to the 30th Division on the evening of 8 July and thereby gave General Hobbs responsibility for the advance to the south. But believing that the Germans had had time to react, and feeling therefore that he could no longer expect a quick armored thrust to the high ground west of St. Lô, he set a new objective only three miles to the south —Hill 91 at Hauts Vents. General Hobbs transmitted the new mission to General Bohn.

The second day

For the second day of attack, General Bohn passed the second reinforced tank battalion in his CCB column through the first. Passage was difficult because of the terrain, but by mid-morning the tankers were making slow progress through muddy fields and along narrow trails. Opposition was still slight, so General Hobbs ordered General Bohn to get his men out of the fields and moving on the lanes. General Bohn passed the order down. When the battalion commander seemed hesitant to abandon the slower and more cautious hedgerow method of advance, General Bohn personally started forward to change the manner of attack.

Traffic congestion and rain delayed General Bohn so that it was early afternoon before he reached the forward area. When he repeated his order to get the tanks moving on the roads, the subordinate commander demanded angrily whether General Bohn realized this was contrary to General Corlett's and General Watson's directives and contrary to the training of the tank-infantry teams. In reply, General Bohn took personal command of the battalion.

General Bohn reorganized the leading battalion to get the tankers onto the roads. Anxious to give some sign of progress, he dispatched eight tanks ahead of the main body. These tankers were to disregard communications with the rear, move to the main highway, turn left and south for several hundred yards to an intersection leading right and southwest to Hauts Vents, and seize Hill 91. Moving in single file down a country lane and spraying the ditches and hedges with machine-gun fire, the eight tanks soon vanished from sight.

Meanwhile, Generals Corlett and Hobbs were becoming insistent that the attack should be pressed with greater vigor. This stemmed from their anxiety over the possible approach of German forces. Aerial reconnaissance and intelligence reports from other portions of the front confirmed the movement of enemy armor toward the Vire-et-Taute sector. As cloudiness turned into drizzling rain and obscured the ground, General Corlett suggested that the troops in the bridgehead take special antitank measures. Soon afterward a rash of rumors made the troops uncomfortable over the possibility of an enemy armored counterattack.

Part of the 2d SS Panzer Division launched two counterattacks on the 30th Division's right flank near Le Desert—a probing action late in the morning and a full-scale effort early in the afternoon. The attacks were contained, but rumors of disaster caused a few supporting units and some hysterical soldiers to fall back to the St. Jean-de-Daye crossroads.

Combat-level confusion

During the second counterattack, the eight tanks dispatched by General Bohn reached the main highway, but instead of making the correct turn to the left, the lead tank turned to the right and moved north. The seven others followed.

Just south of the St. Jean-de-Daye intersection, a tank destroyer company had emplaced its 3-inch guns to cover the main highway. Panicky stragglers told the tank destroyer crewmen that German armor had broken through the American lines a scant few miles away. A regiment nearby erroneously reported fifty enemy tanks moving north along the highway toward St. Jean-de-Daye. Air bursts from unidentified guns exploding in the vicinity seemed to confirm the presence of German armor, and the tank destroyer crewmen peered anxiously through the drizzle and listened for the sound of tank engines. They were fully alert when the silhouette of a tank hull nosed over the top of a small rise a thousand yards away.

There could be no doubt that this was the enemy. But a tank destroyer officer radioed higher headquarters to make doubly sure. The reply came at once: there were no American tanks in the area. By this time, several others had come into view. Firing machine guns and throwing an occasional round of high explosive into the adjacent fields, the tanks moved steadily toward the tank destroyer positions. At a range of 600 yards, the tank destroyers opened fire. The first round scored a direct hit on the lead tank.

It was, of course, the lead tank of the eight sent out by General Bohn. Before mutual identification could be made, two tanks were knocked out. There were ten casualties among tankers and tank destroyer crewmen.

The six remaining tanks reversed direction, rolled south on the highway toward Hauts Vents, and again disappeared. Shortly before darkness the tankers reported they were on the hill objective. Though their radio transmitters were working, their receivers, for

some perverse reason, failed to work.

The advance is halted

Meanwhile, General Bohn succeeded in getting the bulk of his leading battalion to the main highway. He had also gotten the third battalion in his CCB column there by means of a cross-country movement. As both battalions began to drive rapidly toward the objective and it began to appear that CCB would complete its mission that evening, General Hobbs ordered General Bohn to halt about a mile short of Hauts Vents and set up defensive positions for the night.

General Hobbs reasoned that the Germans might counterattack again during the night, and therefore felt that defensive positions were more important. If CCB took Hauts Vents, the 30th Division would have to advance in a supporting attack to give CCB adequate flank and rear protection in an area where enemy strength was presumably present. Before continuing his attack, General Hobbs wished to reorganize his units. A temporary defensive posture would insure his desire.

As General Bohn complied and assumed defensive positions, he vainly tried to recall the six tanks on Hill 91. These tankers failed to receive his radioed instructions, but reported that American planes were strafing and bombing them in the last light of the fading day, an air mission requested earlier but delayed by bad weather. Fortunately, none of the tanks was harmed. They formed a perimeter in a field and waited through the night for the arrival of the remainder of CCB.

News that six tanks of CCB were on the objective was received at higher headquarters with some skepticism. Nevertheless, since the possibility existed and because there was some uncertainty about the precise locations of the CCB positions, corps and division artillery had difficulty planning and executing their normal harassing and interdictory fires for the night. When morning came, and no reinforcement had appeared, the six tanks turned back and rejoined CCB.

Result of confusion

It took CCB two more days of strenuous attack to secure Hill 91 at Hauts Vents, and by then the full strength of the Panzer Lehr Division was counterattacking in the Vire-et-Taute area. The possibility of exploiting the Vire-et-Taute bridgehead by a deep armored thrust through a soft spot in the German defenses had vanished. An unusual opportunity had been missed. The slow and painful type of combat, with its high casualty rate, characteristic of the battle of the hedgerows, was to continue.

Why was coordination so strikingly absent in this action? The reason may perhaps be found in the relative inexperience of First Army. Though all commanders were applying the same tactical doctrine and though all troops had been trained in that doctrine, First Army was not yet a team. The individual commanders up and down the chain of command were not yet working together in that close coordination that requires a minimum of overt or articulate direction. It would be several weeks yet before the commanders at all echelons could anticipate the wishes of the next higher level and could therefore secure the necessary coordination of parts in cooperation and normal sequence so as to give harmonious results to properly functioning muscular movements.

Brigadier General S. L. A. MARSHALL

Group Shock and the Future Battle

DON MARQUIS' ARCHIE THE cockroach was bewailing the hard lot of his kind. Said a butterfly: "We lead a nice life in the country; you should turn yourself into another kind of insect."

Said Archie: "That's fine, how do I do it?" Said the butterfly: "I'm just stating the broad policy; it's your job to supply the implementing details."

Anyone writing about the probabilities of the atomic battlefield must feel like Archie. It is easy enough to state principles, drawn from experience, which regulate the prospects of control. But it is infinitely difficult to say what chance tactical organization has to stay joined, survive and fight within the limits thus loosely defined.

There are two main aims toward steeling such hope as we have. We need to seek harder than ever that spiritual self-sufficiency that we have ever tried to mature in the individual rifleman. Far from being extinct, he is our main hold on the future. Beyond that, our first concern should be with communications. With due respect to the importance of improved intelligence and greater mobility, it is only through a more perfect articulation of all situational knowledge within our own side that an army fighting atomic weapons may re-group and hold the field.

Certain propositions deriving directly from American combat experience bear on what we have a right to expect. Regrettably there has been no systematic co-relating of information about shock weapons effects on troops, the burdening of larger troop units from that cause, the resulting degree of tactical immobility and the rate of unit disintegration consequent to the overload. It is therefore necessary to review the documentation which I have personally collected to set a few guidelines toward further exploring this most complex and fascinating of all operation questions. They are:

1 The rule-of-thumb that when a large battle formation takes twenty percent casualties it becomes operationally spent is accurate. The reason is that such a loss reflects a reduction by more than half of the men who fight with weapons.

2 The line company itself may sustain in excess of sixty percent casualties but still stay tactically solvent, capable of holding ground, relatively undemoralized.

3 Once a battalion or company takes twenty percent casualties and is without help in evacuating them, or is ordered to withdraw, it is insolvent. The burden of moving, or of sustained caring for, its men, then overloads the seventy-five percent which is able-bodied.

4 When troops are out of communication, with no knowledge of their situation and no tangible hope of relief or the resumption of friendly contact, fear depletes physical power at fourfold the normal combat rate. Within about seventy-two hours, though casualties are light, the combat power of the unit is cut in half.

5 If troops are physically cut off, though remaining in radio contact, and twenty percent of their number are down from wounds, while first-aid requirements are lacking, the drain on fighting morale is as in proposition 4. Inertia resulting from shock grips the majority, the leaders grow increasingly desperate and organizational unity withers.

That list is enough for the purpose at hand. While it is undisputably true that the demoralizing power of a weapon is not according to its killing radius, what that radius does to communications is decisively important. To the average fighter, an exploding block buster is not more terrifying than the next-to-ear zing of a rifle bullet. During one of the atoll fights I saw three riflemen react when a USAAF plane mistakenly dropped a heavy bomb on the

American position. Its 40-foot crater was just eight feet from the edge of the shellhole covering them. They tumbled back half buried under the dirt shower. In two minutes they picked up and went forward. First, however, they looked back. What they saw had a combat field normalcy. The bomb had hit no one. Their own forces were still behind them. A characteristic reaction!

Therein lies the main point. Being influenced by the Hollywood view of things, we too easily forget that land battle is a free-wheeling enterprise. Command endures only when men are willing and able to be commanded. Control stays possible only through the acts and services which generate within the unit a feeling of oneness and of being supported by a military body much stronger than itself. When the lights go out, the wires fail and the road to the rear seems endless, when there is nothing at hand but solitude and the clutch of a terrible danger, each man shrinks to his smallest self and group energy evaporates.

WHEN I TRY TO IMAGINE the unprecedented risks of the atomic battlefield, one terribly indelible incident recalls itself. It was at the end of the invasion of the Gilberts in late November, 1943. We had just finished with Makin and Tarawa and the convoy was at sea steaming right next to the equator when first light came. I was aboard the transport *Leonard Wood*. On the line directly opposite us was the Kaiser-built carrier, *Liscome Bay*.

As I watched her directly over the rail, the sea lit up with a flash and a roar. A Jap submarine had swung inside the destroyer line and put two tin fish in the *Liscome's* side. She blazed like a torch and went down in a couple of minutes, leaving a few specks floating on the Pacific waters.

We picked up most of the few survivors; I think it was about forty of a company of around 900 men. Excepting a couple we buried at sea, this group was aboard us during the twelve day run to Oahu.

Most of them had no outward scars. Luck had been with them personally. But they reacted like a platoon of ghosts. Asked a question, they answered slowly, painfully, as if all recall was difficult. Of initiative, they had none. They would not talk among themselves. They withdrew from all activity. They sat there staring into space with their chins down.

The magnitude of the tragedy, the completeness of the surprise, the overpowering sense of change—these together were of such immeasurable impact on the senses and emotions that those who watched wondered if these men would ever know full recovery. Had we needed them for anything, they would have been quite useless.

Not fully to anticipate that atomic battle will bring a similar mass shock reaction on a larger scale than any heretofore known in war would mean failure fully to press the search for new methods, medical and tactical, which would moderate the impact and keep the problem within soluble limits. Either we will see that point in its full significance and revise our structure and SOPs accordingly, or shock effects which could be kept local by the swift spreading of all information will be made general by the lack of it.

HUMAN NATURE IS THE one constant not transformable through the reiterating of "doctrine." We may find a better way to use men's powers through heavier ordeal. But we will not change cockroaches into butterflies. Our basic subject is man. All advance depends on knowing him better as a fighting animal, in the mass and under pressure, a highly sensitive, tough, yet fragile vessel, with definable limits.

For example, I feel certain that troop exhaustion under tactical conditions is a simpler problem than we make it through our disregard of our own battle data. Many times a company is regarded as beat-up and temporarily paralyzed when it needs nothing more than twenty minutes in the sacks.

Fundamentally, the anticipation of every battlefield condition and reaction entails first a more perfect understanding of human anxiety. Let's go back thirteen years. In 1944 we were all supposed to have trained for gas warfare though few of us had experienced it first-hand. Some days after the Normandy landing a false gas alarm sounded. It swept the beaches and up to the fire line. Trained troops became hysterical and uncontrollable, though there was no danger. Later they expressed astonishment that any such thing could happen. An embarrassing incident, certainly, but one we cannot afford to forget.

In conclusion, military training and its yield, discipline and fighting elan, are not of themselves final safeguards, assuring greater fortitude and swifter recovery under all conditions.

The dependence of man on his fellows is greater within military organization under battle stress than in any other earthly activity. When the means of distributing the feeling of active, close support dissolves, discipline loses its special magic.

Either we have communications or we have nothing.

The why of the change of name of embarkation commands

. . . TO FIGHT OVERSEAS

COLONEL A. J. CORNELSON

TO many thoughtful American soldiers the transportation burden on the Army fighting a war overseas in the atomic age appears almost intolerable. World Wars I and II and the Korean conflict were supported from the Zone of the Interior through complex, highly concentrated ports of embarkation such as New York, New Orleans and San Francisco—logical targets for enemy attack with nuclear weapons. The possible consequences to an overseas army if these vital links in its lines of communication were seriously disrupted are appalling.

A grave weakness in a modern port of embarkation is overcentralization of operating functions. For example, although the physical loading of a ship may be accomplished at an outport, many vital functions such as cargo planning, manifesting and routing of freight may be centralized in the headquarters location of the port of embarkation. A disruption of the headquarters disrupts operations hundreds of miles away.

Late in 1955 the Department of the Army adopted a new approach. The New York Port of Embarkation was redesignated the Atlantic Transportation Terminal Command, the New Orleans Port of Embarkation became the Gulf Transportation Terminal Command, and the San Francisco and Seattle Ports of Embarkation were replaced by the Pacific Transportation Terminal Command.

THESE changes in nomenclature were in themselves relatively unimportant. While they more accurately describe the tasks performed by the old ports of embarkation, this fact alone hardly justified changing the name of installations that had functioned for over half a century, supporting our forces overseas in four wars. The vital change was the establishment of a headquarters to supervise subordinate self-contained units capable of operating independently in case of necessity. The DA directive provided an "order of command suc-

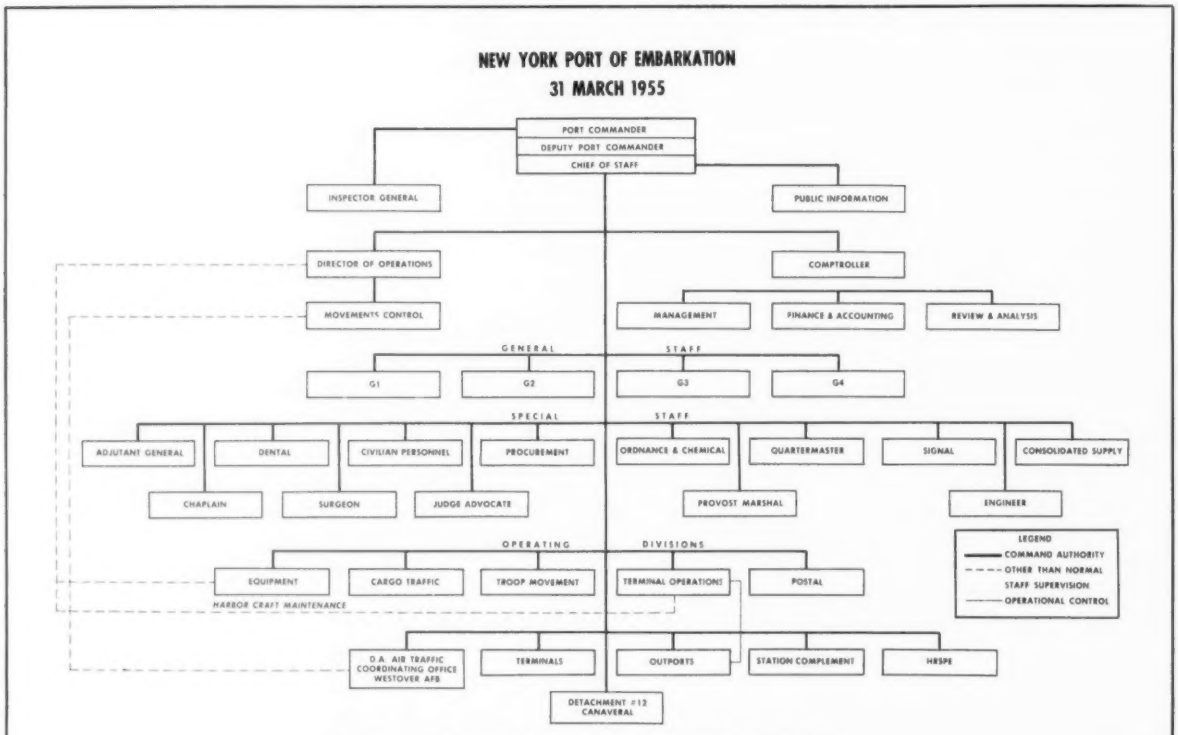


Figure 1. The old New York Port of Embarkation

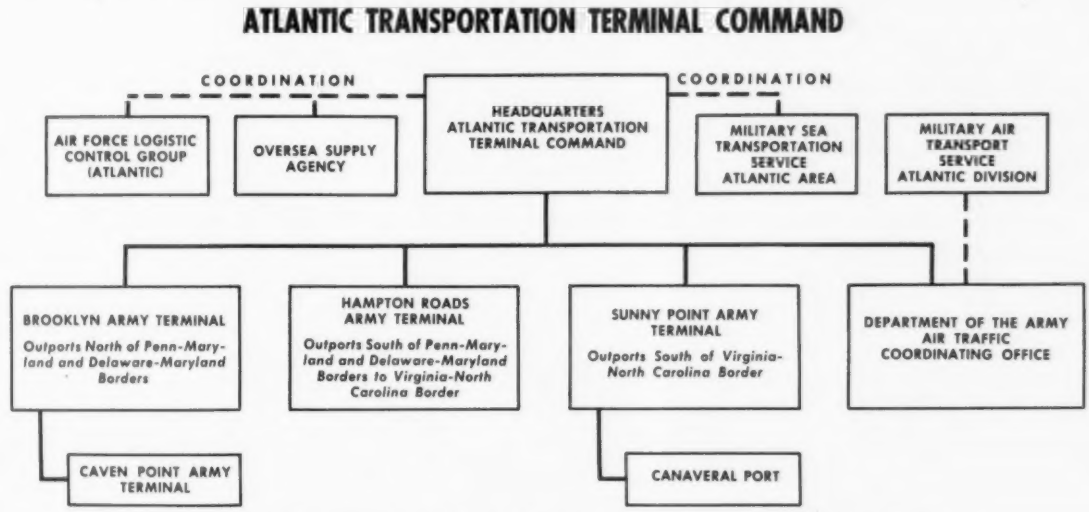

ATLANTIC TRANSPORTATION TERMINAL COMMAND
COORDINATION
COORDINATION
AIR FORCE LOGISTIC CONTROL GROUP (ATLANTIC)
OVERSEA SUPPLY AGENCY
HEADQUARTERS ATLANTIC TRANSPORTATION TERMINAL COMMAND
MILITARY SEA TRANSPORTATION SERVICE ATLANTIC AREA
MILITARY AIR TRANSPORT SERVICE ATLANTIC DIVISION
BROOKLYN ARMY TERMINAL
Outports North of Penn-Maryland and Delaware-Maryland Borders
HAMPTON ROADS ARMY TERMINAL
Outports South of Penn-Maryland and Delaware-Maryland Borders to Virginia-North Carolina Border
SUNNY POINT ARMY TERMINAL
Outports South of Virginia-North Carolina Border
DEPARTMENT OF THE ARMY AIR TRAFFIC COORDINATING OFFICE
CAVEN POINT ARMY TERMINAL
CANAVERAL PORT

Figure 2. **The reorganized New York Port covers the same geographical area**

cession" in the event of disaster to the major headquarters. *Figure 1* shows the old organization and *Figure 2* the new as they apply to the Atlantic Coast. In comparing the old and new organizations it should be noted that the geographical area of responsibility is unchanged.

I do not mean to imply that all the boxes in *Figure 1* have suddenly disappeared. The functions remain, but have been realigned. Planning, coordinating and supervising responsibilities have been retained at the headquarters level; while operating functions have been decentralized to responsible commanders at the terminal level.

Each of the new commands is assigned a coastal sector of responsibility to include such "inland points as assigned by the Chief of Transportation." In many ways a terminal command is similar to a corps in its relationship to combat divisions. It does not administer in detail; it assigns missions, allocates workloads, supervises execution and inspects for performance; it reviews and analyzes programs, and provides reinforcement at critical times and places by lateral redistribution of the resources of the command.

Colonel A. J. Cornelson, *Transportation Corps,* is presently assigned to the NATO Defense College in Paris, where he is on the faculty as the U. S. Army member.

THE new organization provides a more efficient expansion base for mobilization. Additional terminals including beach operations in the event of necessity can be activated without disrupting the existing organization of operating terminals. This is an especially important consideration since it is vital that personnel and supplies to overseas areas continue to flow smoothly and without interruption. Staging areas and holding and reconsignment points which are so vital in large-volume operations fit logically in the new command structure at the operating level. Given the necessary communications facilities the headquarters of the command can effectively supervise and direct terminal operations at many widely separated locations along the coast.

The box in *Figure 2* labelled "Department of the Army Air Traffic Coordinating Office" (ATCO) gives DA control of the growing air traffic. Each year the number of Army personnel and the amount of Army freight moving to overseas destinations by air increase. The physical loading and movement of this traffic is, with a few exceptions, the job of the Military Air Transport Service (MATS). It is essential, however, for the Army to control this movement, thus DA ATCO.

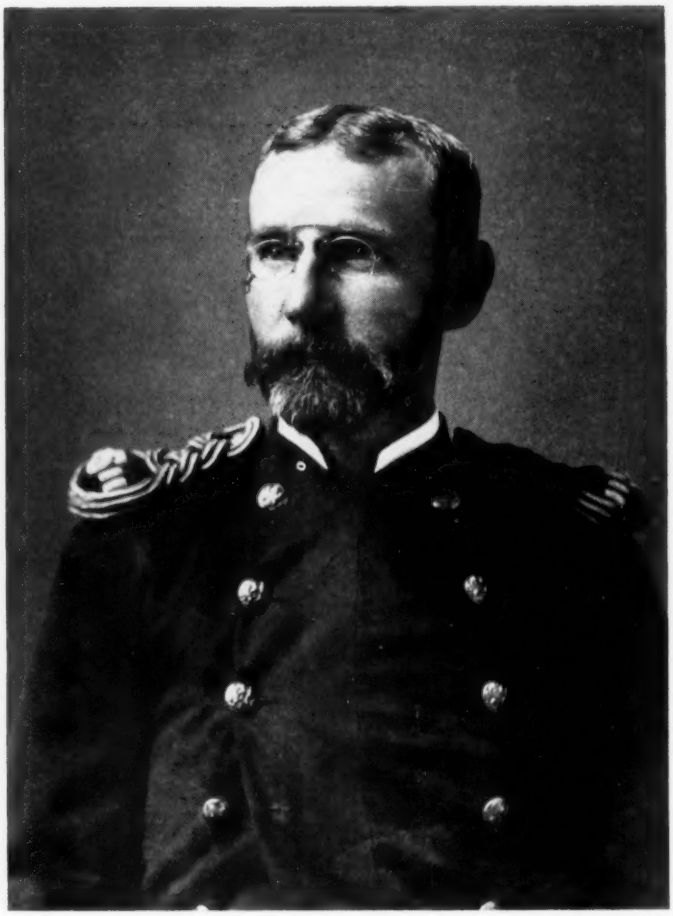
The general order establishing the three terminal commands located their headquarters at the Army terminals of Brooklyn, New Orleans, and San Francisco. These locations were chosen initially in order to minimize disruption of operations during reorganization and to avoid the immediate necessity for additional facilities. There are few inherent advantages for the headquarters to be located at these points and certain obvious strategic disadvantages. It is contemplated that eventually these headquarters will be located at non-strategic, non-industrial points inland.

WHAT effect does this reorganization have on the support of our forces in Europe if, say, New York is wiped out in a surprise atomic attack? If the headquarters of the Atlantic Transportation Terminal Command has been relocated elsewhere, the net effect is the loss of Brooklyn Army Terminal. The control of vital traffic remains intact and personnel, supplies and equipment can be rerouted through Hampton Roads and Sunny Point Army Terminals, each capable of functioning independently. Meanwhile, the headquarters can activate additional terminals as required by the situation without burdening the busy commanders of Hampton Roads and Sunny Point. In the previous situation, in the event of the destruction of New York, the control of port operations on the entire East Coast would have been destroyed except for action taken at the Washington level.

In summary the new terminal commands spell additional security for the logistic support of the doughboy in overseas areas.

The Life of Reilly

LT. COL. WILLARD L. JONES



The valor of the commander of Battery F, 5th Field Artillery, was legendary. He deserves to be remembered

CAPTAIN Henry J. Reilly stood by a Chinese roadside, his gray beard blowing in the breeze. Above the rattle of the battle's rifle fire, he bellowed orders for his lieutenant to blow open the massive gates barring the way of American troops into the city of Pekin. Through a hail of bullets kicking up dust on the roadway, the lieutenant went calmly forward to etch with his thumbnail a cross on the heavy door. This was to serve as an aiming point for the gunner on the 3.2-inch long-recoil gun.

Lieutenant Colonel Willard L. Jones was commissioned in the Infantry from ROTC in 1928, transferred to AAA in 1940, and during World War II served in England and Africa with several AAA units. He is on duty in the Office of the Chief of Military History. This is his fourth appearance in this magazine.

Even as the lieutenant went forward, a Boxer rifleman atop the high wall shot Captain Reilly through the mouth and killed him.

The lieutenant—later General and Chief of Staff, Charles Pelot Summerall—earned his first place in history that 15th of August 1900 with Captain Reilly's Battery F, 5th U. S. Artillery. Nearly fifty-five years later, he lay on a bed in Walter Reed Army Hospital and recounted how Captain Reilly's battery opened a door in China. Sadly the old general told of his greatest disappointment that day: Reilly didn't live long enough to see the Chinese door opened!

General Summerall's nostalgic and reverent memories of Reilly were shared by others. General Adna R. Chaffee, who commanded the American contingent of the China Relief Expedition of 1900, in his official report rarely wrote of his sole artillery element as Battery F, 5th Artillery, but reported the roaring rewards reaped by his troops from the fire of "Reilly's battery."

Such respect for an artilleryman who never rose above the rank of captain was well deserved, even though Reilly's name does not appear in the *Dictionary of American Biography*.

The record of this unsung artilleryman needs to be told. It is a great pity that more cannot be found to proclaim to twentieth century Americans and the Army, especially artillerymen, the qualities of this man who fought so valiantly for his adopted country.

Henry Joseph Reilly was born in Ireland on 9 September 1845. He came to the United States as a youth and spent a year working in car maintenance and construction for the Pullman Company.

When the Civil War came, Reilly joined the U. S. Navy. He was with

the Mississippi Squadron at Cairo, Illinois, and bombarded the Confederate works from June to July 1863. He was also in the action at Grand Gulf, on the first Red River expedition. Reilly was discharged from the Navy in February 1864.

Reilly's year of experience with the Navy gave him a liking for big guns. He didn't stay out of the Civil War long. In September 1864 he enlisted as a private in the 5th Artillery. This regiment, then newest of the Army's Regular artillery units, was to be his home for the rest of his life. He served first with Battery K, a few months with D in 1895-96, and his last two years with Battery F. Thus, throughout his artillery career he was with "light batteries," the "distinguished and favorite arm" now known as field artillery.

Twenty-five years a first lieutenant

Reilly himself had qualities that made him distinguished. He was a corporal in November 1865, a sergeant in March 1866, and on 1 December 1866 he was appointed second lieutenant. Less than two years later, on 18 September 1868, he was promoted to first lieutenant—a rapid rise in the post-Civil War Army that saw such slow promotion that a great man like Henry J. Hunt, a major general when Chief of Artillery of the Army of the Potomac, had gone back to lieutenant colonel and did not become a colonel until 1869.

But Reilly's rise to first lieutenant seemed to be the end of the line for him. It was not until 11 January 1892 that he was ordered before an examining board of officers at Fort Canby, Washington. It found Reilly well qualified in all subjects except infantry drill, but rated him "very good" even on this. The board recommended his promotion to captain.

It was two more long years, however, before the coveted promotion came through. Reilly had served 25 years 3 months 15 days as a first lieutenant before his rank as captain was announced on 3 January 1894!

The delay was not because of Reilly's failure to prepare himself for promotion, nor because he had failed to distinguish himself in the best traditions of the service. The post-Civil War Army had been cut back to a minute fraction of what the country needed. Preparation and service did little to afford promotion, for advancement was restricted to in-branch promotion, and the Army had only five artillery regiments—greatly understrength in officers and in men.

Soon after Reilly was commissioned second lieutenant he was sent to Key West, Florida. A severe yellow-fever epidemic broke out at Fort Jefferson in the Dry Tortugas, the isolated cay in the Gulf of Mexico where Dr. Samuel Mudd was imprisoned for unknowingly aiding the assassin of President Lincoln. The epidemic threatened to kill off the prisoners there and to wipe out the garrison.

The danger of death to anyone coming in contact with the yellow-fever scourge on the mosquito-infested Tortugas was almost certain—too certain to warrant the commander at Key West ordering help to Fort Jefferson. But Second Lieutenant Reilly volunteered to go there and assume command of the battery. His service was so outstanding that it prompted a woman, Nellie Johnson, to write President Andrew Johnson:

> I beg permission to call your attention to what I think a most humane and commendable act of First Lieut. Henry J. Reilly, 5th Arty., U. S. Army. In 1867, when yellow fever raged with terrible violence at Fort Jefferson, Dry Tortugas, and it was believed that the garrison would be entirely swept off, Lieut. Reilly, then stationed at Key West, volunteered to go to the relief of his people. The pestilence was so violent that the Commanding Officer at Key West would not take the responsibility of ordering succor. It was under such circumstances that Lieut. Reilly offered himself for the humane service, and continued with his suffering comrades till the fever subsided.
>
> I relate these facts to you, believing you will find a way of rewarding conduct so worthy an officer and man.

This was indorsed by the President:

> Let a brevet [an honorary promotion] be conferred upon Lieutenant Reilly, 5th Arty. Jan. 18, 1869.
>
> ANDREW JOHNSON

The President's recommendation was in vain. The Senate confirmed the brevet on 3 March but the commission was withheld because of a law passed three days earlier prohibiting certain classes of brevets.

Reilly's bravery in the face of bullets as well as disease is attested to by another entry in his file at the Archives. This took place when the then Captain Reilly was commanding and fighting his Battery F against those brave and ferocious fighters, the Filipino Insurrectos, shortly before his death in China. The record says:

> Reilly, Capt. 5 Arty—Commended for coolness and intelligence displayed under a heavy and closely delivered fire. . . . Nothing could have exceeded the coolness and gallantry of Captain Reilly and all his detachment. His practice was as if on the target range. [General J. C. Bates indorsed this commendation in these words:] It is worthy of note that Captain Reilly brought his guns into action at a range of 400 yds from the enemy and soon moved up to a position which was afterward found by accurate measurement to be 265 yds from the hostile lines. His fire at this range was very effective and his action was characteristically cool and efficient.

Reilly was also commended by General Schwan "for dash and brilliant action" in the expedition to Cavite Province, 7-14 October 1899.

Education of an artillerist

Throughout his professional life Reilly had prepared himself for the efficient use of his guns and the command of men. He was seventeenth in the class of 1876 at the Artillery School at Fort Monroe. In addition to attending service schools and his technical studies, he taught himself to read French, German, and Spanish, the better to study European commentators on the Franco-Prussian and the Russo-Turkish wars.

Captain Reilly's memorial stone in Arlington National Cemetery bears Paul's words to Timothy: "I have fought a good fight, I have finished my course, I have kept the faith."

Reilly was not content to acquire this knowledge himself. He felt a need to impart it to his men and to others. He contributed a dozen or more articles to professional periodicals and delivered a lecture, "Artillery," to the graduating class at the University of California in 1895.

How Reilly found time and strength to engage in all these activities is hard to understand. Throughout his career he suffered bad health. Twelve times he was hospitalized with such diverse ailments as heart trouble, acute bronchitis, influenza, malaria, heat stroke, and a fall from his horse.

Moreover, in his thirty-six years in the Army Reilly served at twenty-eight places—at no one long enough to build up his frail constitution. Back and forth across the country he moved, from posts on the East coast to posts on the West coast, serving at several two or more times. He had one brief tour in the District of Columbia, and was commandant at Alcatraz Island, a fortification in San Francisco Bay, from June to August 1892. Reilly's service, experience, and assignments gave him a wide range of knowledge for his last three wars.

During the Spanish-American War Reilly was in the confused struggle to concentrate an American army for use in Cuba. In March 1898 he and his battery shuttled from Fort Riley to Tybee Island, Georgia. The next month they went to Chickamauga Park, Georgia, and then to Tampa, Florida, to wait for two months. From there they finally left for Cuba for the Santiago Campaign of June and July 1898.

From Cuba the battery returned by way of Montauk Point and Fort Hamilton to Philadelphia for the 1899 Peace Jubilee before being sent to the Philippines for the Insurrection.

To China on a British transport

After little more than a year of campaigning and combat in the Philippines Captain Reilly and his stout-hearted Battery F were sent to China as artillery support for the American contingent formed to rescue Legation personnel besieged by the ruthless Boxers in Pekin.

Reilly's battery sailed from Manila on an old British vessel with ten thousand rounds of live ammunition between decks. The battery had worked hard getting it on board and building stalls for the horses. Hardly had the men settled down in their crowded quarters, when the greatest menace of the sea threatened the ship and terrified the horses: "Fire!" The soft Australian coal in the fuel bunkers caught fire, filling the *Flintshire* with choking smoke and adding to the intense, humid heat of the South China Sea summer. The battery fought fire to Nagasaki, where the smouldering coal was unloaded and replaced.

The ship then sailed for north China and anchored eighteen miles from the forts guarding the mouth of the river that led to Taku. Small steamers and lighters landed the battery at Taku the next morning, on a hostile shore, without their guns and equipment. They had almost lost them the previous day when some of the locally procured barges carrying horses and guns went adrift. There was an unusual soldier on one gun barge—a stowaway on the *Flintshire*, a deserter from another British ship. Captain Reilly had enlisted him in Battery F. When this man found himself on a runaway barge he rigged a jury sail and got the craft under control. The next day a small boat guided the AWOL barge to a dock at Taku where the wandering Britisher and the guns rejoined the worried Captain Reilly.

Some tired railroad rolling stock was requisitioned to take the complete battery to Tientsin, where the Allied force was assembling. It was not a cooperative coalition force as each national element prepared to set out in separate columns toward Pekin.

Captain Reilly was undoubtedly happy to have his battery together again, and looked forward to the fighting as a simpler problem than the mad trip to Tientsin.

Fire support for the Japanese

The battery went into bivouac about 2100 hours. During the night they heard heavy firing. The next morning the Americans found their Japanese allies heavily engaged. Captain Reilly had his guns unlimbered and gave aid to the embattled Nipponese. On the following day the Allies ran into the principal Chinese army and had a sharp engagement. The Russians and Japanese had gotten out of line, so the attack fell to the British and American elements. After spending the night on the battlefield Captain Reilly's artillerymen marched until they were near Pekin.

Approaching the city before daylight next morning, the Americans again ran into heavy Chinese resistance. The battlefield was littered with dead Russians who had been ordered to attack in a sector two miles away, but who had again struck ahead of schedule and at the point assigned to the Americans. The Russians had failed miserably. Battery F's guns were emplaced to give enfilade fire support to the American and British assault troops. The gunners slept alongside the bastioned outer city wall after it was carried.

The next day Captain Reilly's artillery again spearheaded the attack. Reilly ordered the battery to blow open the gates in the next wall leading into the Forbidden City.

Lt. Summerall marks the point

These were not simple garden gates, but ten-inch-thick hardwood doors set in massive stone walls. They were reinforced and barred by equally thick metal-sheathed horizontal beams. Chinese riflemen atop the wall and flanking the gate poured a withering fire into the ranks of Battery F.

While Reilly directed the operation, Lieutenant Summerall went forward to mark the aiming point. One of Reilly's men came from the mountains of Tennessee. General Summerall recalled that this man could shoot the long-recoil field gun with the deadly precision of an expert squirrel hunter. Three rounds were necessary to cut the barring beam, but Reilly failed to savor or see the success of his battery's fire.

A Chinese rifleman on the wall spotted the bearded captain directing the fire on the Chinese sanctuary, drew a bead on the grizzled head, and shot Captain Reilly dead.

In dry matter-of-fact language the medical report stated that Captain Henry J. Reilly had died of a "Gun Shot Wound fracturing ramus of jaw and severing tongue from floor of mouth to point of exit." Death was probably instantaneous. Captain Henry Joseph Reilly left behind his grieving battery and a widow with four young children.

In Arlington National Cemetery an impressive memorial stone stands near the Amphitheater. There every gunner—be he field artilleryman, armored, or infantry heavy-weapons man—should go and render a salute to Henry J. Reilly, Captain of Reilly's Battery—fighting Irishman, good American, intrepid Artilleryman.

THE NONCOMMISSIONED LEADER

MAJOR WILLIAM GARDNER BELL
Illustrated by GIL WALKER

The prestige of his position is important to the effectiveness of the Army

PRESTIGE is something that a noncommissioned officer must earn. It is not something automatically bestowed with rank, something acquired merely by sewing on a set of stripes. As with anything worthwhile, prestige is not easy to come by; but as with everything worthwhile, it has its rewards.

By and large, the individual noncommissioned officer will earn his standing in the group—if the conditions are right. It is up to command to see that the conditions *are* right. Unceasing effort is required to secure and safeguard the many things which add up to prestige.

The noncommissioned officer is the link between the leaders who formulate policies, plans and decisions and the soldiers who execute them. He is a leader, a member of a group often identified as the backbone of the Army. At his best he is Sergeant William D. Owens, who earned personal prestige the hard way—on the battlefield in contact with the enemy—and in the earning, reflected much upon the corps of which he was a part. S. L. A. Marshall has told his story:

In midmorning the enemy tried again with armor—four . . . tanks leading, and then several companies of infantry. . . . The German infantry now had a broad wall of steel from behind which they could pour fire into the American rifle pits. They made swift use of it, and at forty yards range, the two forces became locked in a death embrace, one hugging earth, the other metal.

The mortar fire became hellish; the men of Lieutenant William A. Oakley's platoon could scarcely raise their heads. Casualties were occurring all along the line. Oakley was hard hit by a mortar burst and spouted so much blood that he had to be dragged away in the middle of the fight. His place was taken by Sergeant William D. Owens. . . .

The position was falling apart. Owens could feel it. . . . Half of Oakley's men were dead or wounded by this time. Of Owens' squad, only three remained.

So Owens arose, and started walk-

Major William Gardner Bell, *Armor,* is a former Editor of *Armor.* During World War II he served with the 350th Infantry in the Italian campaign. Recently returned from a tour in the Staff Secretariat at Allied Forces Southern Europe Headquarters, he is now in the Office of the Chief of Military History.

HOW TO GET THE MOST FROM YOUR NONCOMMISSIONED OFFICERS

AUTHORITY

Consistently address noncommissioned officers by their rank.

Always refer to them as *noncommissioned officers*, not as NCOs or noncoms.

Never withdraw privileges of all noncommissioned officers of your command, but take positive action against individuals who transgress.

Whenever appropriate, have your key noncommissioned officers attend staff conferences and commanders' briefings.

Commend deserving, high-quality noncommissioned officers for outstanding performance of duty by the award of commendation ribbons, letters of appreciation and commendation, or certificates of achievement.

Don't oversupervise your noncommissioned officers.

Don't use noncommissioned officers for menial tasks.

Except when it can't be avoided, don't place senior noncommissioned officers under the supervision of civilians.

Inform your noncommissioned officers in advance of significant matters pertaining to the unit, such as maneuvers, field problems, training programs, disciplinary matters, standards, and so on. This will avoid unfounded rumors and allow all echelons to make necessary advanced plans.

Have your senior noncommissioned officers assist in the conduct of inspections.

PRIVILEGES

Pay your troops alphabetically by pay grade, thereby allowing noncommissioned officers and master specialists and specialists first class to report before the remainder of the unit.

If possible provide separate rooms for senior noncommissioned officers, master specialists and specialists first class.

Within existing facilities, establish separate dining areas or, at the minimum, separate tables within the mess for noncommissioned officers and master specialists and specialists first class.

Exempt qualified personnel in the first two pay grades from repetitive periodic training except as instructors and those required for supervision. For those excused from such training, conduct advance training or on-duty unit schooling.

Authorize identification cards as authority to leave the post during off-duty for those in the first two pay grades.

RESPONSIBILITIES

Insist on thorough appreciation of the noncommissioned officer's full-time responsibilities to his men and his commander.

Appoint senior noncommissioned officer councils in each battalion or separate company.

EDUCATION AND TRAINING

Thoroughly train noncommissioned officers for their jobs and make sure that they are always prepared to handle instruction or other duties when they appear before their subordinates.

Encourage attendance at noncommissioned officer academies and other such courses.

Encourage noncommissioned officers to take full advantage of their many opportunities to increase their general level of education.

ing around, talking to the remaining men, and telling them that they must stick it. He was conspicuously in the open. . . . How he escaped death during the next half hour is beyond explanation. But by the account of all present, it was his steadiness—and that alone—which held the position.

Owens' men told him they couldn't take it any more. . . . The men were saying, "Let's get out, or we'll all be killed." Owens told them, "No, we will wait for orders. They haven't said we could go." . . .

There were these few minutes of crisis and then it was over. The Germans raised a Red Cross flag and asked for a half-hour respite to remove their wounded. They didn't come back; they had had enough.

In this action, American soldiery and the noncommissioned officer reached the zenith. For one man, and for everything he served, all paths came into focus at a spot in Normandy on a midmorning in June of 1944. But who could measure, reduce, set down in plain words and clear type the ingredients along the maze of backtrails, before the focusing took place?

And yet, while the whole defies measurement, involving as it does multiple unknown quantities, we can apply standards to some of the parts in our efforts to bring our noncommissioned officer corps into line with Sergeant Owens and others like him. By no means all of our enlisted leaders will be called upon to meet the test in combat, but our standards must nevertheless be directed to that end, for all noncommissioned officers, regardless of specific assignment, are a part of the Army "body" even though it is only the arm that does the swinging and the fist that makes the contact.

Success often is measured by the extent to which we practice the principles which experience has shown contribute to the goal we have in view. There is nothing new or startling in what I will cover here. The value lies simply in the restatement of a number of things which go far toward enhancing the prestige of the noncommissioned officer. They are points bearing on privilege, responsibility, education and training, and authority.

The manifestations of authority

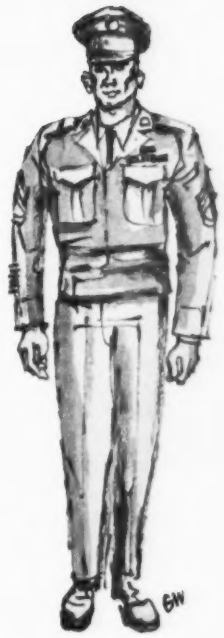
By authority I mean not the exercise of it, but those manifestations that identify and confirm it. For example—

If you look into the meaning of rank, you are led quickly to title, dignity, respect, pride, honor, position. As

there is reason for our enlisted rank and reason why an individual holds it, it should follow that our enlisted leader be always addressed by his rank, by both his superiors and subordinates. For even while we may agree with Machiavelli that "titles do not reflect honor on men, but rather men on their titles," we assume that an individual holding rank has earned it and the respect that goes with it.

As there should be a respect for rank, so should there be a respect for the duties discharged by its holders. Following World War II there was a general backsliding of noncommissioned officer prestige. A tendency developed to charge commissioned officers with tasks properly within the province —and capabilities—of their enlisted subordinates. This happened in the administrative area as well as in operational duties. Thus the usefulness of sergeants and corporals was frittered away and the ill effects were as broad as the connotations of inutility.

By failing to place a full load of responsibility on our ranking enlisted personnel, we demonstrate a lack of faith in them and undermine their standing with their subordinates, the private soldiers. At the same time, we bring down the level of commissioned officer prestige and responsibility. Before we know it we are handing our noncommissioned officers menial or degrading tasks, to their personal annoyance and dissatisfaction, and at the sacrifice of prestige before their subordinates. This is no framework on which to build a corps of Sergeants Owens. It strikes negatively at attitude, and the attitude with which our enlisted leaders approach their duties is critical to successful operation in peace or in war. Samuel Henry Kraines in *Managing Men* confirms this: "By far



the most important single factor in the army which produces low morale, a high sick call rate and neurotic reactions is the *attitude of the leader* whether he be commissioned or noncommissioned. . . . Poor mental attitudes in soldiers are often a direct result of the mental attitudes of the leader."

The awarding of a full measure of responsibility will secure for our stripe holders the right level of authority, and will insure its preservation, along with the creation of favorable attitudes. Once that responsibility has been assigned, we must be careful that it is not watered down by oversupervision, something equally as faulty as the withholding of adequate and appropriate responsibility. Incidentally, there are many assignments in our worldwide commitment today where military personnel work in a mixed military-civilian staff; to the maximum extent possible, our senior noncommissioned officers should be placed under the supervision of commissioned or warrant officers rather than civilians.

Keep them informed

No individual is effective who is not informed of what is going on. It is especially important that we inform our noncommissioned officer, in advance, of significant matters pertaining to his unit and duties: training programs, field problems, maneuvers, disciplinary actions, inspections, and so on. Only thus will he be able to act intelligently, plan properly, and scotch rumors. This may seem to be an obvious principle—keeping personnel informed—but for one reason or another it goes by the board now and then, even at the end of the line—in combat. An incident of the 1944 Italian campaign points this up.

An infantry platoon leader was assigned a night patrol on his fourth night in combat. Briefed by the battalion and company commanders, he instructed his runner to have the platoon sergeant and squad leaders report to him for their rundown on the patrol mission, the route, and the manner in which he planned to conduct the operation. He was immediately informed by his superiors that there was no time for such details—"Just move out!" The officer moved out. In a sharp action, two of his men were killed and five wounded. Fortunately he survived the patrol. Had he been knocked out at any stage of the outward move, his noncommissioned officers, lacking knowledge of the route and mission, would have had little choice but to

NONCOMMISSIONED OFFICER PROMOTION POLICIES IN SEVENTH ARMY

General Clarke congratulates Sergeant Robert D. Woodward who was an honor graduate of the Seventh Army Noncommissioned Officers Academy and the 30,000th man to finish the course

THE selection of men for promotion to noncommissioned officer grades requires thought and careful consideration, Lieutenant General Bruce C. Clarke wrote in a letter addressed to all members of his U. S. Seventh Army on 26 November 1956. In this letter General Clarke wrote:

"The promotion policy of a command has a strong bearing on morale and over-all efficiency. It must be fair. By it the commander can develop men for positions of supervision and leadership."

He then listed these twenty-three qualifications and attributes to be considered in the promotion of noncommissioned officers:

1. Reliability.

return to the starting point. Five minutes of passing on the word, urgent as the situation might have been, conceivably could have meant the difference between success and failure of the mission. And so with any mission.

Under normal circumstances, then, it is right and helpful for our enlisted leaders to have the information that will make it possible for them to further the mission, whether in or out of war. Their integration into the picture may go well beyond that. For example, when it is appropriate, those in key positions should be permitted to attend staff conferences and commanders' briefings. By the same token, they will be matured and will acquire stature if they are utilized to assist in the conduct of training inspections. By informing them, permitting their attendance at briefings, and arranging for their participation in inspections, we are incorporating our noncommissioned officers into the leadership pattern. The result can only be a more effective Army.

Prompt recognition

In the service it is an accepted principle that outstanding performance be appropriately recognized; certainly all agree that deserving and high-quality noncommissioned officers should be rewarded for outstanding performance of duty—by the award of commendation ribbons, letters of appreciation or commendation, or certificates of achievement, if under non-combat conditions, and by the appropriate decoration if under fire. But the recognition is not always forthcoming. Perhaps we just fail to think of it. Or the reason may be more complex. Turn once again to S. L. A. Marshall and his revealing *Men Against Fire* for an interesting example:

> During the mass interview of one infantry company in the Central Pacific, the statements of all concerned made it evident that one of the sergeants had performed so conspicuously during two days of attack that the progress of the company had pivoted largely around his individual exploits. He had not been recommended for decoration though the facts revealed by the others said clearly that he was deserving of the Silver Star three times over. I asked the company commander why nothing had been done. He frowned his astonishment at the question. "When the fighting started, he practically took the company away from me," he answered. "He was leading and the men were obeying him. You can't decorate a man who'll do that to you."

Of course you can and you should and you must! All leaders, all commanders, all supervisors, of whatever rank, should be constantly on the lookout for superlative performance, to insure that it is properly rewarded.

There is, inescapably, the other side of the coin—substandard performance on the part of a stripe holder. Often there is a tendency to invoke mass deprivation of privilege, to penalize the many for the defaults of the few. It is far more just to take positive action against the individual offender.

So much for some points on authority. What of privilege?

When the word privilege is put forward many visualize something on the order of exemption from responsibility, escape from obligation, release to self indulgence. I have in mind rather those operating procedures which accord our enlisted leaders treatment commensurate with their rank and responsibilities. This includes the provision of separate living and dining accommodations for noncommissioned officers within the organization's facilities (depending on availability of space); payment of troops in alphabetical order by pay grade to permit the noncommissioned officers to be taken care of before the unit is paid; authorization for the first two grades to use the standard identification card in pass-taking rather than requiring that they have a special-privilege pass; and exemption of senior enlisted rankers from attendance at repetitive periodic training when they are not required as instructors or supervisors. In the latter instance it is of far greater benefit both to the individual and the organization if these men are excused and are given advance training or on-duty unit schooling.

These points bearing on privilege are perhaps generally accepted or acceptable principles, but there is plenty of slack to take up in the matter of

2. His knowledge of his present job and his preparation for the next higher one.
3. Leadership: Can he handle men?
4. Ability to organize and manage a job.
5. Knowledge to detect, and courage to correct, errors in subordinates.
6. Initiative: Does he perform well without close supervision?
7. General educational level attained.
8. Appearance; military courtesy; neatness.
9. Attitude; loyalty; enthusiasm.
10. Participation in athletics.
11. Ability as an instructor.
12. Does he use his off-time to improve himself?
13. His record at noncommissioned officer and other schools.
14. Is he a good soldier all the time?
15. Is the job he is charged with being done better now than when he took it over?
16. Judgment and common sense: a good sense of values.
17. Ability to receive and carry out instructions.
18. Has he been efficiently filling his grade position?
19. Qualification in his individual weapon.
20. Accident record.
21. VD record.
22. Incident record.
23. AWOL and Article 15 record.

"There may be other considerations," General Clarke continued. "They should all add up to confidence that the man will play his part well under any conditions, especially in unusual situations. Unless you want him as a member of your team, do not promote him or recommend him for promotion."

application. So it is where responsibilities are concerned.

The common denominator

The way in which a noncommissioned officer carries out his two-way responsibilities—up to his superiors, down to his men—is of course influenced by the type of individual he is. No two persons are alike. Elbert Hubbard's Rowan who carried the "Message to Garcia," Alvin York of World War I fame, Sergeant Owens —all are different personalities, as different as any trio of noncommissioned officers within anyone's ken. But they attained a common denominator of effectiveness. Commanders must promote noncommissioned officer effectiveness by applying uniformly high standards for them and particularly by insisting on each one's thorough appreciation of his full-time responsibilities to his men and to his commander.

As I have mentioned, not all of our noncommissioned officers will be called upon to play a spectacular role in combat. Many may never reach a fighting zone. But the principles of leadership are as applicable to the sergeant in a ZI training center as they are to the sergeant at the point of contact with the enemy halfway around the world. The development of a full awareness of responsibility both to his superiors and his subordinates will insure in turn a full effectiveness in whatever position he is called upon to serve, assuming that he knows his job.

The several excellent guides available to the noncommissioned officer stress the value of self confidence and emphasize that confidence is the product of knowledge. Therefore, these publications devote a good deal of space to details of education and training. As there is much the individual may do, so there is much that command may do. Part of this consists in encouraging the individual to take advantage of the opportunities, such as USAFI, readily available to him in his goal of raising his general level of education. Part includes the holding of classes in subjects designed to insure that the chevron holder will be thoroughly trained in his job and qualified and always prepared to instruct his men.

These, then, are some of the things that bear on the prestige of our noncommissioned officer. Considered singly, some will appear insignificant indeed. In the aggregate, they form a foundation on which to build the effectiveness of our enlisted leaders, and thereby the effectiveness of our ground forces. This is worth all the effort we can give it. For, as Rudyard Kipling stated it, "the backbone of the Army is the Noncommissioned Man!"

ERECTOR SET ARTILLERY

Within the battle area there is a crust where friend and foe are mixed. Here fast and accurate light artillery is king. Here the combat commander needs a variety of light (nonatomic) artillery weapons with which to hit the enemy. Consider, for example, the interesting possibilities of a 4.2-inch mortar piggyback on a 105 howitzer

COLONEL JOHN D. BYRNE

A 105mm howitzer with a 4.2-inch mortar mounted piggy-back would be a useful combination for testing future developments of light artillery weapons and organization. These developments demonstrate the marvelous combinations that are possible when the American arsenal is used as a king-size Erector set.

In maintaining both atomic and nonatomic tactical capabilities, the weapons and organization of light artillery assume a crucial importance. The old distinction between infantry and light artillery has been erased by the power of new weapons and by the range and efficiency of communications equipment.

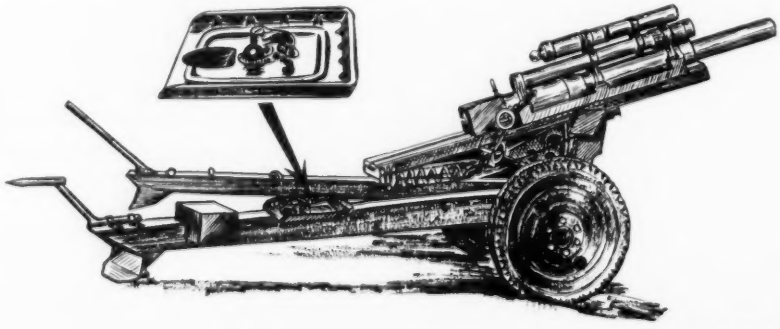
Our purpose here, therefore, is to examine the possibilities of combining into a single unit the highest professional qualities of infantry and light artillery, and of providing that unit with a versatile family of weapons.

The 105-4.2 combination is a good place to start because it can be done today, and will demonstrate what can be done to increase the fire capability of small units engaged in close combat. If the mortar is fired from the howitzer carriage, it acquires the stability and the rapid traverse of the field piece. Moreover, the combination of two barrels gives a much wider choice of trajectories, both high- and low-angle, for attacking targets in hard-to-get-at positions.

Variety of blows

The two tubes also offer the commander a chance to hit the enemy with a greater variety of blows: the mortar shell with its thin walls, high carrying capacity for chemicals, and almost vertical descent; the howitzer shell with its thick steel walls, greater restraint of the bursting charge, and resultant production of high-velocity fragments. Moreover, the commander can make better use of the ammunition ton: the howitzer requires more than twenty per cent of the weight of the round as propellant and cartridge case, the mortar less than five per cent. Thus, in firing a ton of ammunition, the mortar would deliver about 400 pounds more steel and high explosive on the enemy. Transportation-wise, the extra barrel can pay for itself in a day or two of firing. The efficiency of the weapon as an ammunition user is particularly important when transport is at a premium, as in airborne operations.

In addition to making the field commander think in terms of weapons efficiency, the combination weapon would point the way to possible improvements in manufacture. First is the possibility of simple, rugged sights like the gunner's quadrant that can be bore-sighted and used on a variety of guns, howitzers, mortars and rockets. Secondly, it raises the question of what other combinations might be useful. Should some howitzers mount recoilless rifles, thus giving a relatively flat-trajectory antitank weapon to the artillery battery? Should the howitzer carry the baseplate of the mortar bolted to its trail, so that mortar and howitzer can be used separately? Should a basic light artillery carriage be designed to mount a family



Colonel John D. Byrne, *Artillery* (USMA 1939), an occasional contributor, commanded the 39th FA Battalion (3d Infantry Division) in Africa, Sicily and Italy. He earned an MA at Columbia and is a graduate of the Army War College. Now on duty in the Pentagon, his last contribution was "Gunnery in Small Combat Units" (January 1957).

of gun-howitzer-mortar barrels? This might simplify ammunition supply by making it possible to pack each type of ammunition on a pallet containing a certain number of rounds and one barrel to fit the rounds.

Tactical possibilities

The test combination of weapons can be used to even greater advantage in working out the organization of weapons units for battle. In any battle area, there is a certain crust, where friend and foe are mixed together, and where sheer explosive violence runs a poor third to accuracy and timing. This is where light artillery is the only instrument of fire power that can do the job. We can discuss its organization in the old terms of company, battalion and regiment, even though the new principles are to be applied to different organizations.

The tactical possibilities of the 105-4.2 combination are fascinating. With the mortar baseplates available to him, the commander of a dispersed battery could easily keep some weapons ready to fire at all times. The mortars could be set up in an advanced position while the howitzers continued to fire from the main position; then the mortars would take over and the howitzers would move up. The reverse would be extremely effective in providing close fire support in rear-guard actions.

The combining of different types of weapons units is an ideal solution to the problem of dispersing while retaining the ability to seize and hold ground. For example, if three support weapons are emplaced to fire on an objective, this places the three weapons units plus the supported unit in a tactical area. This is hardly dispersion. Dispersion would be achieved when one organization capable of firing the three necessary weapons was present. Instead of bringing up three weapons units, the commander would bring up loads of ammunition, and the necessary weapons tubes or launchers.

This is not to say that a fire-support mission can be accomplished with fewer units or with less manpower. But it is to say that the power of modern weapons and communications equipment has jumped the old boundary that used to exist between supported units and supporting units of the combat arms. The case in point is direct support artillery: No longer can three infantry battalions rely on a fourth (artillery) battalion to provide the combat intelligence, survey, communications, ammunition supply, and weapons that comprise the light artillery function. In atomic war, this is to put all the artillery eggs in one basket. Moreover, the dispersal of the infantry battalions will prevent a single artillery battalion from occupying a central 105mm howitzer position within effective range of all three infantry battalion positions. The artillery battalion must therefore place some of its guns in each infantry battalion area. The sensible approach is to add something more important than weapons to the infantry unit: the capability to control fire power.

WEAPONS AS AMMUNITION USERS

Weapon	Total weight of round	Weight of projectile or warhead	Approximate efficiency per cent
105 howitzer	42.0	33.0	78
155mm howitzer	110.0	95.0	86
4.2-inch mortar	25.5	25.0	98
106mm recoilless rifle	37.0	17.0	46
4.5-inch FA rocket	42.5	17.0	40
3.5-inch bazooka	8.5	3.5	41

Basically, the control of fire power is the linking of weapons to the vital functions of weapons employment referred to above: combat intelligence, survey, communications, and ammunition supply.

Combat intelligence is the key

Surprisingly, the primary function of heavy-weapons support is combat intelligence. Any system of firing high-explosive shells must have accurate, up-to-the-minute information about both friendly and enemy forces. This information establishes the safe-to-fire line and is therefore the first order of business for the weapons people. The fact that accurate intelligence must be obtained for fire-control purposes often obscures the fact that this intelligence has given the commander at battalion and higher level his earliest and most comprehensive report on the tactical situation. This is particularly true of changing situations, and of those troubles that always seem to arise on the boundaries between friendly units.

To gather intelligence, the weapons system must have an observer with each company-size front-line unit. It must improve its coverage by establishing additional observation posts, including airborne observers in light planes.

As this corps of observers directs fire at the enemy, it assists in a second vital function: survey. The weapon itself is the basic front-line survey instrument because the range and azimuth set on the gun sights records the location of the enemy position. But since these gun data are only usable in a single unit, two additional survey tasks must be accomplished. First, the individual weapon must be surveyed in so that sight settings can be translated into map coordinates and thus be made into usable intelligence. Secondly, the weapons must be tied one to another by survey, so that they can all fire at the same target.

Any battalion with a light artillery mission has a requirement for two seperate radio nets that emerges from these observation and survey functions. Obviously, there must be a separate radio net for the observers assigned to a front-line battalion. This provides a communications facility for assembling the combat intelligence necessary to plot the safe-to-fire line and to give the commanders the initial grasp of the situation. In addition, this net keeps the command channels clear of requests for fire and of long transmissions of gunnery data. The second separate net is required for communications between weapons positions for fire-direction purposes. Obviously, the fire direction centers at battalion and regimental level must also be in this gunnery net.

Last, but not least, is ammunition control, mainly a problem of planning and bookkeeping.

The necessary reorganization

A few additions to the standard infantry battalion will be required to link weapons with combat intelligence, survey, communications, and ammunition control. A separate weapons battery would be added to avoid a paper debate over the mission of the present heavy-

weapons company of the infantry unit.

The weapons battery would contain, in addition to standard headquarters and communications elements, versatile weapons platoons, an observer platoon, a survey section, and a fire direction center.

The battalion staff would have a small gunnery section added. The term "gunnery section" not only avoids a clash between the fire direction center and the fire support coordination center, but also covers the additional mission of training. The key to speedy and accurate use of fire power at battalion level is a gunnery officer qualified to teach the necessary weapons characteristics and techniques to his officers and noncommissioned officers.

Potential of the organization

The potential of such an improved weapons organization is tremendous. If a weapons battery is to fire a family of weapons, higher headquarters can never be certain of the weapon to be used. This forces battalion and regiment to use brief, simple fire-control messages; that is, a target location and an authorization to fire a certain number of rounds. A regimental or battalion commander thus can send out through his gunnery section a brief note like: "Enemy infantry at 143, 678; all batteries; 20 rounds HE; TOT 1137." These shorter fire orders should make for more efficient use of radio channels. More important, the principle that the battery figures its own weapons data gives more flexibility to the gunnery section at battalion and higher levels. The methods of the antiaircraft gun operations room become possible. As everyone knows, the antiaircraft gunnery officer keeps announcing the target information, and then at appropriate times has only to tell each weapons unit to fire at a certain rate or to cease fire.

These examples show the tremendous possibilities that are open to us if we improve our control of modern fire power. Specifically, combinations of weapons and unification of the fire-control system will make possible:

(1) A common sighting and boresighting system for a family of weapons.

(2) A common carriage for light artillery that can fire several calibers of ammunition by using interchangeable barrels.

(3) A better use of the training and skills of American manpower. Our technically minded people can easily master the use and maintenance of a family of weapons. It has been my experience that men familiar with many different weapons were more skilled and conscientious in using and maintaining weapons than were men trained to serve a single weapon.

(4) A broader unit mission for the combat unit. If the front-line battalion can effectively control light artillery fire, the need to coordinate with supporting weapons units is reduced. In other words, meeting the dispersal requirement of atomic war contributes to mobility in all kinds of war.

(5) A source of field officers of the combat arms as opposed to field officers of infantry, armor, or artillery. These more broadly trained officers are needed not only for the jobs of battalion commander, executive, and S3, but also for the division staff.

Logistics are overriding

World War II and Korean experience has shown, first, that infantry battalion and regimental commanders want a voice in the control of heavy fire power; and secondly, that higher authority expects these leaders to make judgments in weapons control. For both these reasons, the front-line battalion must have the combat intelligence, survey, communications, and ammunition supply capabilities to control heavy fire power.

But the overriding reason is logistical. We have to learn to compare the logistic efficiency of rockets, mortars and cannon so that we can lay the groundwork for better inclusion of a logistic judgment within the system of fire support coordination centers and joint operations centers. For example, the army or theater commander must know whether or not his decision to make good a local shortage of 500 tons of artillery ammunition with naval and air support induces a shortage of 2,000 tons of naval ammunition, bombs, and aircraft parts. More important, each major tactical decision taken in the joint operations center must in some way be translated into shipping priorities. A flexible, rather than an automatic, system of shipping priority numbers must be worked out so that the loading of ammunition ships in New York and San Francisco reflects not the munitions fired in the Battle of the Bulge, but the expected rates of tomorrow's battle.

TRAINFIRE II

(Continued from page 41)

fense, in squad attack movements, and in reorganization on the objective. In combat patrolling, SOPs were developed to train the squad in emergency situations.

"This training program is not limited to a definite organizational structure. It is readily adaptable to fit any new concept in organization without adversely affecting flexibility."

The third step

Now that the second step has been accomplished by Infantry HRU, CONARC plans to conduct a troop test of the findings this year. Meanwhile, HRU work in this field continues. The third step to marksmanship training is already under way—PLATTRAIN—designed to provide a training program for the rifle platoon in all phases of combat firing.

The current policy of training replacements within GYROSCOPE units greatly increases the necessity for, and importance of, detailed and efficient platoon tactical training. Also, the increased dispersion demanded of modern warfare increases—not decreases—the vital importance of the basic infantry unit.

The rifle platoon is a sound logical starting point in battalion training. United States Infantry Research Task PLATTRAIN is premised on the mobile forces concept as conceived by General W. G. Wyman, Commanding General, U. S. Continental Army Command.

Research in Army training follows a logical and progressive pattern. The Army must have better training methods for its soldiers and units who will be employed according to strategic plans, who will use new weapons and equipment in battle, and who will fight under tactical concepts—all devised through study and research. Marksmanship proficiency is an integral part of this program. TRAINFIRE II is one step in that direction.

Strategy and Organization

The problems of survival will have to be solved in the minds of men

HENRY A. KISSINGER

WHATEVER the problem—whether it concerns our military strategy, our system of alliances or our relations with the Soviet bloc—the nuclear age demands above all a clarification of doctrine. At a moment when technology has put within our grasp a command of nature never before imagined, we are driven to realize that everything depends on our ability to use power with subtlety and discrimination. In the absence of concepts that define the nature of power, its purpose and its relation to policy, the possession of it may serve merely to paralyze the will. All the difficult choices of the nuclear period—the nature of its weapons systems, the risks diplomacy can run, the issues for which to contend—presuppose a doctrinal answer before they can find a technical one.

Henry A. Kissinger is Director of the Harvard International Seminar; Director of Special Studies, Rockefeller Brothers' Fund; and Associate, Foreign Policy Research Institute of the University of Pennsylvania. This article, somewhat condensed, and reprinted by permission from *Foreign Affairs*, April 1957 (Copyright by Council on Foreign Relations, Inc., New York), is adapted from a study prepared for the Council on Foreign Relations, which will be published in June under the title, "Nuclear Weapons and Foreign Policy."

Resources vs. Strategy

This is particularly true of military strategy. Because we have won two world wars by outproducing our opponent, we have tended to equate military superiority with superiority in resources and technology. Yet history demonstrates that superiority in strategic doctrine has at least as often been the cause of victory as has superiority in resources. Superior doctrine enabled the Germans in 1940 to defeat an Allied army superior in numbers and at least equal in equipment but wedded to an outmoded concept of warfare. Superior mobility and the use of artillery, a better relationship between fire and movement, furnished the basis of Napoleon's victories. These were victories not of resources but of strategic doctrine: the ability to break the framework which had come to be taken for granted and to present the antagonist with contingencies he had never considered.

Strategic doctrine translates power into policy. Whether the goals of a state are offensive or defensive, whether it seeks to achieve or prevent a change, its strategic doctrine must be able to define what objectives are worth contending for and to develop the appropriate force for achieving them. By establishing a pattern of response *in advance* of crisis situations, strategic doctrine permits a Power to act purposefully in the face of challenges. In its absence a Power will constantly be surprised by events. An adequate strategic doctrine is therefore the basic requirement of American security.

IT may be argued, of course, that we do possess a strategic doctrine expressed in the decisions of the Joint Chiefs of Staffs and of the National Security Council on the basis of which the force levels of our Armed Forces are determined by Congress. But the decisions of the Joint Chiefs and of the National Security Council give a misleading impression of unity of purpose. The officials comprising these bodies are either service chiefs or heads of executive departments. As administrators of complicated organizations, they must give most of their attention to reducing the friction of the administrative ma-

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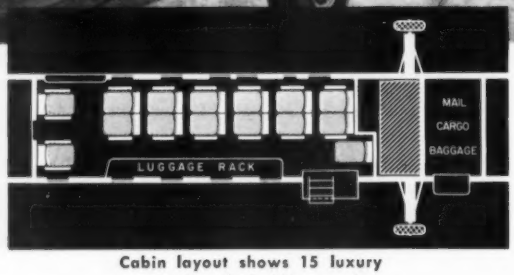

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chine both within their department and in the relation of their department to other agencies. The heads of departments do not stand above the battle of the bureaucracy; they are spokesmen for it. In fact, the departmental viewpoint is sometimes purposely exaggerated in order to facilitate compromise.

As a result, the conclusions of both the Joint Chiefs of Staff and the National Security Council reflect more the attainable consensus among sovereign departments than a sense of direction. Because agreement is frequently unattainable except by framing conclusions in very general language, decisions by the Joint Chiefs of Staff or the National Security Council do not end interdepartmental disputes. Instead they shift them to an interpretation of the meaning of directives. And departments or services whose disagreements prevented the development of doctrine in the first place will choose the exegesis closest to their original point of view. The seeming unanimity of our policy-making bodies only defers the doctrinal dilemma until some crisis or the budgetary process forces a reconsideration under the pressure of events.

Within the Department of Defense these problems are compounded by the obsolescent division of functions among the services and the predominant rôle played by fiscal considerations in setting force levels. The Key West agreement of 1948 confirmed the traditional division.

Overlapping Missions

Until the end of World War II, this assignment of rôles represented distinguishable strategic options: the Army was in fact powerless on the sea beyond the range of its coastal artillery and the Navy could not project itself far inland. The Air Force was not yet independent and the range of planes was sufficiently short to permit the division of functions among naval and army air forces to follow roughly the division among the senior services.

But with modern weapons, the traditional definition of primary missions amounts to giving each service a claim to develop a capability for total war. For the sky cannot be dominated short of a scale of attack on the opposing retaliatory force which will unleash an all-out conflict; control of the seas implies the destruction of industrial facilities and supply depots deep in enemy territory, as Admiral Burke testified before the Symington Committee; and the Army has declared a 1,500-mile missile essential for the performance of its mission. A division of functions among the services makes sense only if the functions in fact represent distinguishable strategic missions. If each service in the performance of its primary mission must carry out tasks inseparable from the primary mission of a sister service, energies will be increasingly absorbed in jurisdictional disputes. Nor can this problem be avoided by administrative fiat as has repeatedly been attempted. The inter-service rivalries are inherent in the definition of missions; they result inevitably from a division of rôles on the basis of means of locomotion in the face of a technology which makes a mockery of such distinctions.

As a consequence of the lack of doctrinal agreement, none of the services can be certain that a sister service's interpretation of what constitutes an essential target accords with its own. It is therefore convinced that it cannot relinquish control over any weapon which it believes important to the achievement of its mission. The only way a service can be certain that its targets will in fact be attacked is to seek to obtain every weapon that can be used against them, even if such a weapon already exists in a sister service.

Controversy Compounded

The rigid division of functions therefore exacerbates disputes among the services. Since no service can achieve its primary mission without defeating the enemy completely, each service will always consider its force levels inadequate and will be convinced that one reason for this inadequacy is a transgression by a sister service on its field of jurisdiction. Moreover, while the present assignment of rôles produces a duplication of some categories of weapons, it causes some others to fall between two stools. The disputes between the Army and the Air Force regarding the importance of airlift provide an illustration. The Air Force, charged with defeating the enemy air arm, must look on an investment in planes having no strategic or tactical combat effectiveness as a diversion of resources. The Army, on the other hand, cannot carry out its mission if it is not able to get into position rapidly. The present division of functions, therefore, produces either duplication or an inability to consider requirements in terms of overall strategy.

Drawing by Alan Dunn
© 1957 The New Yorker Magazine, Inc.

"Gentlemen, I don't want to be an alarmist, but what if the next war isn't over in ten minutes?"

Another factor which inhibits the development of strategic doctrine is predominance of fiscal considerations in our defense planning. This is not even always a question of deliberate choice. One of the reasons for the emphasis on fiscal policy and technology has been that the former has been explicit and the latter impressively demanding. In the process of coördinating diverse policies, which is the primary function of the National Security Council, there always exists a clear fiscal policy, largely because governmental economy is the *raison d'être* of the Bureau of the Budget and because only one agency—the Treasury Department—is responsible for setting objectives in the fiscal field. But there is rarely, if ever, a clear National Security policy to oppose it. On the contrary, the contending services have been tempted to enlist the backing of the Treasury Department and the Bureau of the Budget by advocating their particular strategy as contributing to governmental economy. The fiscal viewpoint, therefore, often comes to predominate by default; in a conceptual vacuum the side with the clearest and most consistent position will gain ascendancy.

Budget Rules Doctrine

Whatever the reason, every administration since World War II has at some time held the view that this country could not afford more than a certain sum for military appropriations. Now the imposition of a budgetary ceiling is not inevitably pernicious; a removal of all budgetary restrictions would inhibit doctrine even more, because it would lead each service to hoard weapons for every eventuality—as occurred to some extent during the Korean War. And the proliferation of weapons systems unrelated to doctrine will cause strategic decisions—which always involve choices—to be made in the confusion of battle. Budgetary requests are not formulated in the light of strategic doctrine; rather doctrine is tailored and if necessary invented to fit budgetary requests.

As a result, budgetary pressures compound the inherent conservation of the military and end in subordinating doctrine to the battle for appropriations. Each service pushes weapons development in every category without sufficient regard for the program of other services, and each service seeks to obtain control over as many different weapons as possible as a form of insurance against drastic budgetary cuts in the future. The predominance of fiscal considerations in our defense planning actually encourages a subtle form of waste: in the absence of an agreed strategic doctrine, it leads to the proliferation of partially overlapping, partially inconsistent weapons systems. Because to relinquish a weapons system may mean to relinquish the appropriations that go with it, every service has a powerful incentive to hold on to every weapon even after it has outlived its usefulness.

The doctrinal handicap imposed by the predominance of fiscal considerations is not compensated for by an increase in civilian control either within the Executive Branch or by Congress. The difficulty of effective control over military programs is due to two factors: the fiction of the yearly review of programs and their technical complexity. The yearly review is increasingly inconsistent with the realities of defense planning. The hiatus between development and procurement is several years in the case of most weapons; the introduction of a new weapon into a unit implies that all units will be so equipped over a period of time. Thus the first order for B-52s logically carried with it the obligation to continue procurement until all heavy bomber wings of the Strategic Air Command were composed of jet planes. Similarly, the beginning of construction of an aircraft carrier makes almost inescapable future appropriations to complete its construction.

In these circumstances, a yearly review does not bring about effective control; it does ensure, however, that no dispute is ever finally resolved. Each year the same arguments about the efficacy of limited war, airlift and the relative merits of carrier and strategic aviation are repeated, and they are not settled until some technical development outstrips the dispute or an administrative decision allocates rôles and missions which the losing service accepts only because it has every prospect of reopening the issue in the following year. In the absence of doctrinal agreement, inter-service disputes can be resolved only by compromises which may define merely the least unacceptable strategy or by adding to missions and weapons systems.

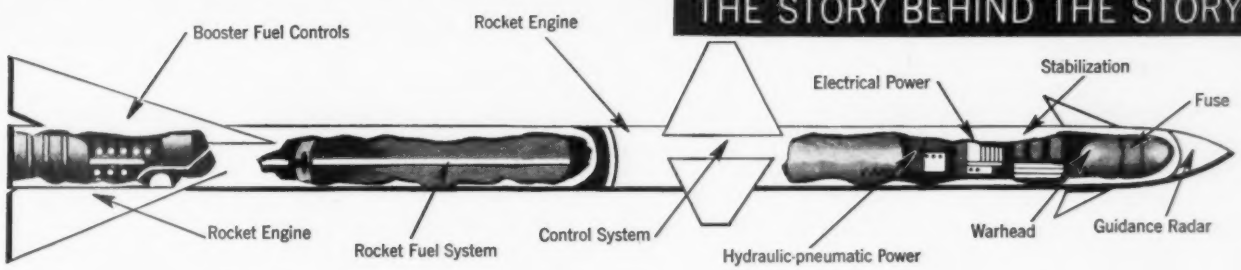
The technical complexity of most disputes complicates civilian control and particularly Congressional control even further. Within the Department of Defense the multiplication of civilian officials, often in office for only a year or two, causes the Secretary and Assistant Secretaries to become less agents of control than a device to legitimize inter-service disputes. Their short term in office makes it difficult if not impossible for them to become familiar with the subtleties of the strategic problems. Instead of being able to establish a unified concept, they become spokesmen for the professional staff on whose advice they depend.

Congressional Control

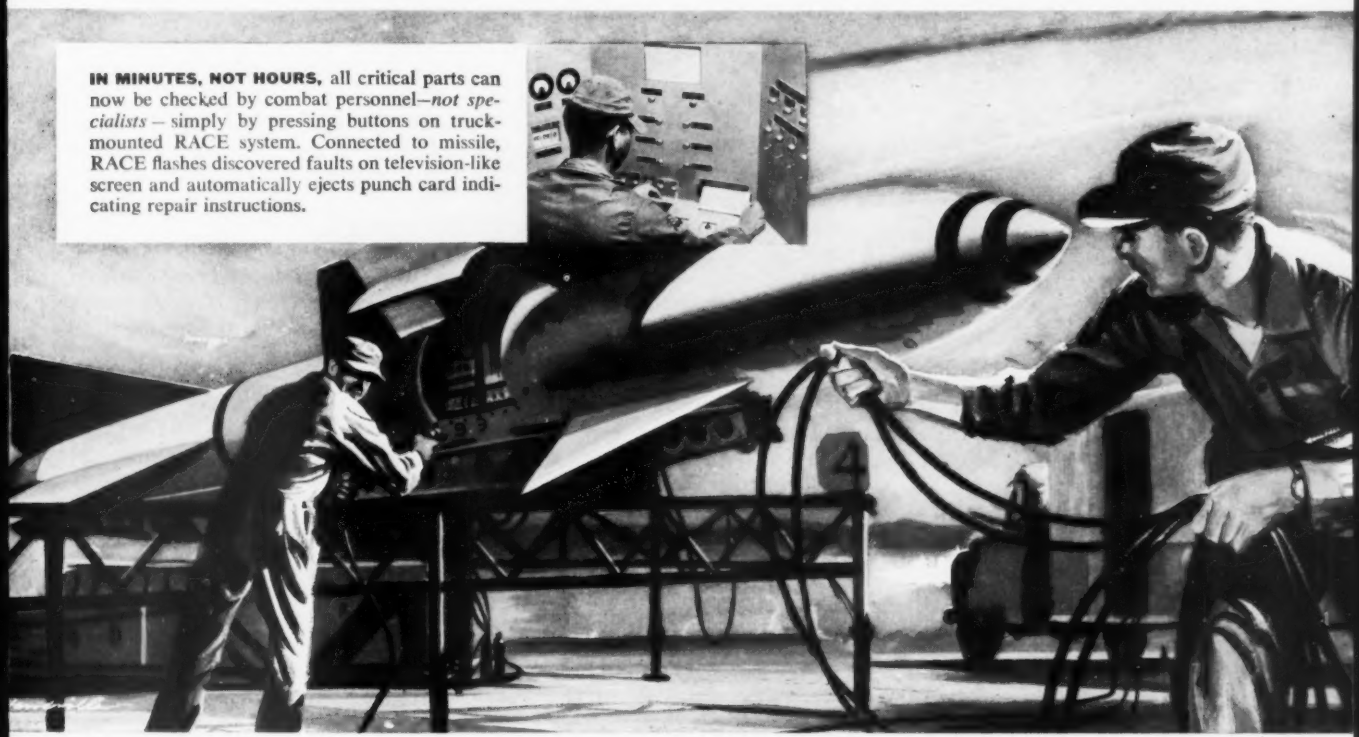
As for Congressional control, the only forum where the over-all defense program can be considered is in the Appropriations Committee. A meaningful judgment by the Congress on the defense budget would presuppose an assessment of the military strength achieved by a given expenditure and the relationship of this strength to a set of national security objectives. Neither condition is met by current practice. To be sure, the budget is introduced by testimony of the service chiefs and their civilian superiors regarding the gravity of the international situation. But no attempt is made to show the relationship of strategy to events abroad beyond the general implication that the proposed program would ensure the security of the United States. In turn, the Congressional Committees can make their judgments only in terms of a vague assessment of the international situation: they will be hesitant to reduce the budget if they feel the situation too grave and they will be disposed to pare requests drastically when they think the situation is not as serious as represented.

Such Congressional consideration of strategic concepts as does take place is usually produced by the dissatisfaction of some service with its budgetary allocations. Thus the B-36 hearings in 1949 resulted from the cancellation by Secretary Johnson of the Navy's giant carrier and the Symington Committee hearings on air power were the consequence of the budgetary ceiling imposed on the Air Force (and other services too) by Secretary Wilson. This procedure has the disadvantage of emphasizing the problems of one particular service and of obscuring the real difficulties which occur in the area of overlapping strategies. Moreover, even the hearings explicitly addressed to the problems of the rôles and missions of the services tend to be conducted in the familiar technical categories. Thus during the Symington hearings on American air power in 1956, relatively

THE STORY BEHIND THE STORY



THOUSANDS OF "FAULTS" can develop in a guided missile, each capable of causing it to misfire or swerve off-course. Pre-launching check-out takes specialized technicians many hours. Under stress of enemy attack, a small but fatal defect might be missed.



IN MINUTES, NOT HOURS, all critical parts can now be checked by combat personnel—*not specialists* – simply by pressing buttons on truck-mounted RACE system. Connected to missile, RACE flashes discovered faults on television-like screen and automatically ejects punch card indicating repair instructions.

IN FLIGHT, RACE-checked guided missile flashes toward target, performing at the peak capacity engineered into it, with all components functioning to give missile best possible opportunity to reach and destroy objective.

"RACE" TO BOOST MISSILE STRIKING POWER

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When a rifle bullet misfires you simply fire another. Guided missiles, however, are costly and complex, packed with precision parts in hair-line adjustment. When these "birds" take off, they've got to fly right the first time!

At present, making sure missiles perform properly takes hours, even days, of careful testing by highly trained crews. And under the stress of actual combat, the best-trained crew might neglect an important check-point—and there are thousands of potential trouble-spots in a typical missile.

Sperry's new missile testing system called RACE does the job in only minutes —with little chance for error. RACE (for Rapid Automatic Check-out Equipment) tests all missile components at the launching platform, warns of the tiniest fault, even tells the operator how to fix it. And RACE doesn't make a mistake because it checks itself while it checks the missile. Result is, missiles are ready to launch far quicker and are more likely to perform with full effectiveness.

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little attention was paid to the strategic concepts of the services; on the whole, the Committee was content to take the services at their own valuations. But a great deal of time was spent on the relative numbers of the Soviet and United States heavy bomber forces and the relative thrust of jet engines. These figures are important, to be sure, but their meaning derives from strategic doctrine. Without a concept of war—or at least of air war—comparative numbers mean little and the relative thrust of jet engines means less. The quest for numbers is a symptom of the abdication of doctrine.

The Budget Climate

In order to create a favorable climate for their budgetary requests, the services tend to emphasize the most ominous aspects of the United States security problem. Because of their awareness that there exists a greater receptiveness for programs which seem to offer total solutions, each service is encouraged to stress the part of its mission which poses the most absolute sanctions. Thus in 1951 the Army produced the "atomic cannon," a cumbersome, hybrid and already obsolescent weapon, in part to obtain access to the nuclear stockpile. Similarly, after the B-36 hearings, the Navy ceased to oppose the identification of deterrence with maximum retaliatory power; in fact, it adopted the theory as its own and in its budgetary presentations, at least, it has emphasized its contribution to the strategic striking force more than its less dramatic task of anti-submarine warfare. And Congressional hearings leave little doubt that even within the Air Force, SAC has the most prestige value.

Thus the budgetary process places a premium on the weapons systems which fit best with the traditional preconceptions of American strategic thought. It is not that the belief in the importance of strategic striking forces is wrong in itself; indeed, the Strategic Air Command must continue to have the first claim on our defense budget. It is simply that the overemphasis on total solutions reinforces the already powerful tendency against supplementing our retaliatory force with subtler military capabilities that address themselves to the likelier dangers and involve a less destructive strategy. A vicious circle is thereby set up: the more terrible we paint Soviet capabilities, the more we confirm our predilection for an all-out strategy. But the more fearful the consequences of our strategy, the more reluctant will the political leadership be to invoke it. In every crisis, we are obliged to gear our measures to the availability of forces instead of having in advance geared our forces to the most likely danger. And even with respect to the forces which we have available our hesitations are multipled because the services do not agree about strategy either for limited or for total war, but particularly for the former.

THE temptation in planning strategy is to substitute power for conception, to identify doctrine with the maximum development of strength. But a basic change in the nuclear age is that victory in an all-out war has lost its traditional meaning. With conventional technology, the side which could mount a superior offensive effort would generally retain a sufficient margin to impose its will. In a thermonuclear war, on the other hand, a superior offensive effort may prove strategically insignificant because even the weaker side may be able to inflict a degree of destruction which no society can support. The doctrinal challenge of the nuclear age is therefore the ability to use force with discrimination and to establish political goals in which the question of national survival is not involved in every issue. Strategic doctrine can no longer confine itself to the problem of providing the weapons for war; it must also relate them to the *purpose* of war.

The Goal of Limited War

Against the ominous background of thermonuclear devastation, the goal of war can no longer be military victory as we have known it. Rather it should be the attainment of certain specific political conditions which are fully understood by the opponent. The purpose of limited war is to inflict losses or to pose risks for the enemy out of proportion to the objectives under dispute. The more moderate the objective, the less violent the war is likely to be. This does not mean that military operations cannot extend beyond the territory or objective in dispute; indeed, one way of increasing the enemy's willingness to come to terms is to take away from him something which he can regain *only* by making peace. But it does mean that the conduct of a limited war cannot depend on military considerations alone; it must reflect an ability to harmonize political and military objectives. A "purely" military decision in a limited war is therefore a contradiction in terms.

A war between major Powers can remain limited only if at some point one of the protagonists prefers a limited defeat to an additional commitment of resources or if both sides are willing to settle for a stalemate in preference to an assumption of continued risk. In either case, however, the protagonists retain the *physical* ability to increase their commitment. To the extent that both sides do increase their commitment the war will gradually expand until one or both Powers reach the limit of their physical resources—until the war has become total. To the extent that only one side is willing to run greater risks it gains an advantage. The ability to conduct a limited war depends therefore on an understanding of the psychology by which the opponent calculates his risks and on the ability to present him at every point with an opportunity for a settlement that appears more favorable than would result if the war continued.

Altered Strategy

With a doctrine of limited war, many of the long cherished notions of warfare will have to be modified or abandoned. One of the cardinal principles of air strategy is that wars can be won only by dominating the air space completely. But any attempt to deprive an enemy of his retaliatory force would inevitably bring on all-out war. Confronted by the prospect that it will be completely impotent once its retaliatory force has been destroyed, a Power will almost certainly decide to use it to deprive its opponent of the means to impose his will. Thus the minimum condition for limiting war will be the immunity of the enemy's retaliatory forces.

Even control of the air over a combat zone will be increasingly irreconcilable with a policy of limited war, particularly if control requires deep penetration of enemy territory. For the enemy is likely to interpret any deep penetration as an approaching attack on his retaliatory force. In any war between major nuclear Powers, sanctuary areas will be almost essential.

Limited war cannot be conceived as a small all-out war characterized by a series of uninterrupted blows mount-

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ing in intensity until the opponent's will is broken. On the contrary, it is important to develop a concept of military operations conducted in phases which permit an assessment of the possibilities for settlement at each stage before recourse is had to the next phase of operations. Paradoxical as it may seem in the jet age, strategic doctrine should address itself to the problem of slowing down, if not the pace of military operations, at least the rapidity with which they succeed each other. We must never forget that henceforth the purpose of strategy must be to affect the will of the enemy, not to destroy him, and that war can be limited only by presenting the enemy with an unfavorable calculus of risks. This requires pauses for calculation. Every campaign should be conceived as a series of self-contained phases, each of which implies a particular political objective, and with a sufficient interval between them to permit the application of political and psychological pressures.

Therefore, it will also be necessary to give up the notion that direct diplomatic contact ceases when military operations begin. Rather, direct contact is essential to ensure that both sides possess as much information as possible about the consequences of expanding a war and are able to present political formulas for a settlement. . . .

Such a change in traditional notions of warfare will not be simple to bring about. On closer examination it may even prove technically impossible. But the discouraging aspect of so much of our thinking about strategy is its refusal to admit that the new technology requires a new order of tactics. Instead we tend to add nuclear weapons to existing strategy as merely a more efficient explosive. This will not only produce appalling casualties; it also may not be adequate to the challenges we will confront. Any progress in our manner of conducting war must therefore be preceded by a doctrinal revolution. We must recognize the new strategy conceptually before we can explore its technical feasibility. It is, to be sure, a tremendous task, but history will not excuse the inadequacy of the response by the vastness of the challenge.

A Single Service?

AMONG the obstacles to an adequate response is the organization of our military establishment. To develop a strategic doctrine requires an administrative structure which leads officers to reflect spontaneously about questions of over-all concern throughout their careers. And this is impossible as long as there exists a division of functions among our services which is growing increasingly arbitrary. A strategy utilizing missiles is not necessarily analogous to air strategy because missiles fly through the air, any more than a 1,500-mile missile is a tactical weapon because it is fired like an artillery projectile.

It may well be that the separation of the Army and the Air Force in 1948 occurred two decades too late and at the precise moment when the distinction between ground and air strategy was becoming obsolete. Instead of making the Army Air Corps independent it would probably have been sounder to mix the two organizations more thoroughly. The separation of the two services was achieved to the detriment of both; different service academies, training schools and war colleges inevitably emphasize a particular aspect of strategy instead of an over-all doctrine in which traditional distinctions should be disappearing, in which the Army should begin to approach the mobility of the Air Force and the Air Force to develop the relative discrimination of ground warfare.

It would still be the wisest course to move in the direction of a single service initially by amalgamating the Army and the Air Force. The strategic problems of the Navy may remain sufficiently distinct not to require integration and in any case resistance to complete unification in the Navy would be so bitter as to obviate its advantages. A unified service with a single system of service schools would force officers at a formative stage of their careers into a framework less narrowly addressed to the concerns of a particular service.

Two Basic Commands

Complete unification among the services is probably out of the question. . . . It may therefore be best to begin reorganization by creating two basic commands, each representing a clearly distinguishable strategic mission. The Army, Navy and Air Force would continue as administrative and training units, much as the training commands *within* the various services function today. But for all other purposes two basic organizations would be created: The Strategic Forces would be the units required for all-out war; they would include the Strategic Air Command; the Air Defense Command; those units of the Army required to protect overseas bases; and the units of the Navy whcih are to participate in the retaliatory attack. The Tactical Forces would be the Army, Air Force and Navy units required for limited war. The Strategic Forces would probably be under Air Force command, the Tactical Forces under an Army officer. The training and doctrine of each Force should be uniform and its officers should attend the same technical and service schools. The schools would continue to be administered by a parent service but the curriculum and student body should be determined by the Force commander.

Such a division would reflect the realities of the strategic situation. While the Tactical Forces might be required in an all-out war and for such a purpose would come under the command of the Strategic Forces, the Strategic Forces should not be utilized for limited war and should be as self-contained as possible even for all-out war. The strategic striking force is the chief deterrent against all-out war; it must therefore be reserved for this contingency. This is particularly important during a limited war, because, to the extent that our retaliatory force was expended in such a conflict, the enemy would lose his incentive for keeping the war limited. An aggressor who could tempt us to utilize our strategic striking force for limited war would gain a strategic advantage, however military operations ended. For to the extent that our retaliatory force suffered attrition in a limited war, our ability to deter the enemy from all-out war would be reduced—and thereby the sanction for keeping the war limited. To consider our strategic striking force as a dual-purpose force will weaken the deterrent to all-out war precisely when it should be strongest.

Different Concepts

Moreover, the nature of the weapons, the planning and the concept of operations differ radically between forces useful for all-out war and those which should be ready for limited war. The weapons system for all-out war is designed to inflict maximum destruction in the shortest possible time. The weapons system for a limited war, on the other hand, should be flexible and discriminating. In an all-out war the

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targets are known in advance, in fact each crew of the Strategic Air Command is training for a specific Soviet target all the time. Everything depends, therefore, on the efficiency with which the plan for all-out war can be implemented. In a limited war neither the locale of the conflict nor the targets can be determined in advance. Everything here depends on the rapidity with which planning can adjust to a developing situation.

The strategic problem in limited war is to apply graduated amounts of destruction for limited objectives and also to permit the necessary breathing-spaces for political contacts. Hence a weapons system for limited war is basically different from a retaliatory force. Limited wars require units of high mobility and considerable firepower which can be quickly moved to trouble spots and which can bring their power to bear with discrimination. The capability for rapid deployment is crucial. For, given the power of modern weapons and the speed of movement of military units, everything depends on seizing a position as rapidly as possible because it will be very difficult to dislodge an enemy once he has become established. Since aggression is unlikely to occur unless the aggressor doubts either the capability or the willingness of its opponent to intervene, the ability to get into position rapidly even with relatively small forces can serve as a gauge of the determination to resist and contribute to the re-establishment of an equilibrium before either side becomes too heavily committed.

The division of our forces into Strategic and Tactical Forces would reflect the real nature of the strategic problem we confront: the necessity of being protected against all-out war as the prerequisite of all other measures and the capability to fight limited war as the form of conflict where the cost is commensurate with the issues actually under dispute.

JCS Would Change

In such an organization, too, the Joint Chiefs of Staff would change their character. They would be composed of a Chairman, the Chief of the Tactical Forces, the Chief of the Strategic Forces, the Chief of Naval Operations (to represent operations such as anti-submarine warfare which do not fit into any of the above categories). Such a group would in its very nature be more oriented towards doctrine than the present Joint Chiefs of Staff. The Chief of each Force would represent an integrated strategic mission and not a means of locomotion. Since service chiefs would continue to administer the traditional services, the Chief of each Force would be freed of many of the routine problems of administration which, as Admiral Radford pointed out before the Symington Committee, make the Chairman the only member of the present group who can give his full attention to over-all strategy.

The advantage of the proposed organization for the conduct of military operations is demonstrated by the fact that joint commands reflecting the same basic concept have been set up in every recent war in which we have been engaged. The new organization would create in peacetime the structure which the requirements of combat would impose on us in any case. To be sure, there would be a possibility of the same contest over appropriations as now between the Chiefs of the Strategic and the Tactical Forces. And there would be the same temptation to invent doctrine to support budgetary requests. But with each Force representing a distinguishable strategic mission, self-interest and requirements of strategic doctrine would be in harmony.

A Two-Year Budget?

In attempting to channel military thought towards doctrine, it would be desirable, however, to relieve some of the pressure inherent in the almost incessant process of either preparing, negotiating or justifying budgets. A great deal would be gained by an extension of the budget cycle for defense appropriations to a period of two years. Thus the military budget would coincide with the term of the House of Representatives. And, as we have seen, many of the essential commitments for major procurement of necessity extend over several years.

To be sure, in its initial stages such a procedure might sharpen inter-service rivalries because commitments would now be more fundamental. But bringing the inter-service disputes to a head would produce healthy consequences in the long run. The failure to resolve current doctrinal disagreements and the pretense of harmony at each budgetary hearing cause the conflict to rage by subterfuge, by planned leaks to newspapers or to Congressmen. A two-year budgetary cycle would free the service chiefs from the constant pressure of short-term consideration; it might encourage planning to turn from the essentially defensive task of justifying force levels to the consideration of the purpose of those forces.

With the emergence of an agreed strategic doctrine within the Department of Defense, the whole process of formulating security objectives within the Executive Branch would gain in balance. An explicit Department of Defense position would then confront the fiscal position. With a better structure for producing strategic decisions and a longer interval between budget hearings (the latter, though helpful, is not essential), inter-service disputes would lose a great deal of their intensity. Doctrine could then be built on the only sound basis: a concept of the nature and possible goals of war.

IN the absence of a generally understood doctrine, our actions will of necessity prove haphazard; conflicting proposals will compete with each other without an effective basis for their resolution. Each problem, as it arises, will seem novel and energies will be absorbed in analyzing its nature rather than in seeking solutions. Our services will find it impossible to make a meaningful choice among the mass of new weapons with which their research and development programs will soon overwhelm them. We will continue to cede the initiative to others and our course will become increasingly defensive.

Many of our problems in the post-war period have been produced by our failure to accept the doctrinal challenge. We have tended to ascribe our standards of reasonable behavior to the Soviet leaders; we have had difficulty in defining our purposes in relation to the revolutionary forces loose in the world. Above all, we have had a penchant for considering our problems as primarily technical and to confuse strategy with the maximum development of power.

One of the paradoxical lessons of the nuclear age is that at the moment when we are acquiring an unparalleled command over nature, we are forced to realize as never before that the problems of survival will have to be solved above all in the minds of men. In this task the fate of the mammoth and the dinosaur may serve as a warning that brute strength does not always supply the mechanism in the struggle for survival.

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THE MONTH'S CEREBRATIONS

OUR MISSION IS TO TRAIN

LT. COL. RICHARD J. BYRNE

THE 2d Infantry (5th Infantry Division), after Gyroscoping from Germany to Fort Ord early in 1956, was immediately faced with the problem of conducting basic training for newly inducted soldiers. This mission had been the responsibility of the 6th Infantry Division (Training), then in process of inactivation, and it had used the committee system at division level. This meant that the company officers and cadre had little or no responsibility for training men assigned to their units.

On the surface the committee system worked in a fully acceptable manner. Instructors were highly specialized and thoroughly familiar with their subjects. They exhibited fine platform delivery and classes were well controlled. In fact, we later found that classes may have been overcontrolled.

In any event, the 5th Division was to take over this training as soon as possible, with its own personnel, in order to inactivate the so-called division committees. When they returned to the States, line companies of the 2d Infantry were at about thirty per cent of authorized strength, made up largely of old-line noncommissioned officers who were specialists in particular weapons but almost entirely ignorant of the procedures and practices of conducting the formal instruction required in basic training.

The first solution arrived at seemed a reasonable one: Have the officers and noncommissioned officers confer with the chief instructor of each subject for which they were to be responsible, stay with him, and learn all they could about conducting classes from experts on the committees.

After about thirty days the regiment was to be completely responsible for all instruction, except for certain combat practice firing problems. That was a sizable order. The directive indicated we were to take over portions of any instruction piecemeal as soon as we felt our instructors were properly oriented and rehearsed. We proceeded to do this and took over on the date specified.

Soon we began to notice that although instructors were wholly familiar with their subjects, the troops did not seem to absorb the instruction. At the end of eight weeks they were given a comprehensive proficiency test. This test proved rather conclusively that although the results were in most cases about on a par with post averages for other units tested, the instruction was not as effective as it should have been. In some cases the post average appeared to be too low.

This situation called for correction, or we were simply spinning our wheels. So we took a close look at our method of conducting classes. We had merely taken the system that had been used by the committees of the 6th Division and replaced their instructors with our own. On the surface this looked fine. Instruction was given practically by the numbers. For example, in weapons training, the instructor described how a certain component must be disassembled. Assistant instructors then disassembled. The instructor gave the command STUDENTS, whereupon No. 1 of the four men at the weapon began to disassemble the weapon, again with each step under strict control of the instructor. In turn, each trainee performed the step *if* time allowed. No talking was allowed, no discussion among trainees, no movement or noise except that made by the soldier working on the weapon. This looked fine to visitors and inspectors. Good control and the absolute minimum of noise and confusion. But it wasn't doing the job. Classes were overcontrolled and even the natural curiosity of troops to learn was stifled by the requirement of keeping incidental noise or talk to the minimum.

At a discussion with the regimental commander changes were proposed. Taking disassembly and assembly of weapons as an example, again we proposed that the instructor describe how the component was to be disassembled and assembled. Assistant instructors, using mock-ups, would be talked through the disassembly and assembly by the numbers. The instructor would inform the class that it had so many minutes to practice the operation. Those not so quick to learn would thus have more time to perfect each operation, while those who learned quickly could assist. The class would be allowed to talk and move about the weapon, and encouraged to help one another. Noncommissioned officers of their own platoons would also help out during this practical work phase.

This system, which stressed *doing* rather than listening, went into effect for all instruction. Oral teaching was kept to a minimum, and once the initial instructions were given, the public address sets were turned off. Platoon noncommissioned officers were responsible for most of the supervision of the practical work. This served as an added incentive for noncommissioned officers not only to pay strict attention to the instruction, but to consult and study manuals during off-duty hours in order to be better prepared.

The system was first tried on a group of new trainees, the so-called packet personnel destined for the 85th

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Infantry (10th Infantry Division), who were to train with our battalion for about twenty-four weeks. The results were excellent. Not only did the added responsibility give the noncommissioned officers a new lease on life, but the results of the subsequent proficiency tests created a spirit of competition between companies which added to the over-all *esprit* of the battalion.

Company L, the first tested, set a new post record in the performance test and maxed the automatic rifle in the process. In ten subjects tested, with a maximum possible total score of 109, its average in all subjects was 82.34 or 75.5 per cent of maximum. This contrasted with a post average of 65.56 or 60.1 per cent of maximum.

We believe test figures are more valuable in determining effectiveness of instructional methods than reports by inspectors and visitors. Classroom procedures as outlined in training publications and as taught at service schools are sound, but they should not be allowed to become the overriding factor. Inspectors and visitors were less impressed by our methods than by the classroom procedure used before, because the over-all picture was not quite as neat. Our classes were noisy while troops discussed their work and learned by doing; there seemed to be less control than inspectors liked to see. But the results of the test are, it seems, conclusive.

The troops the 2d Infantry shipped to the 85th were as well trained as soldiers anywhere who had been taught for the same length of time. They were confident and capable, and ready to take their places on the infantry team with a minimum of orientation. In addition, the noncommissioned officers benefited immeasurably professionally because of the added responsibilities we placed on them and the requirement for detailed knowledge of all infantry subjects generated by the training system.

This last I think is extremely important. We *required* our noncommissioned officers to operate. We insisted that they attain—and maintain—a high standard, especially in conducting instruction. It was largely a matter of education. All formal instruction was prepared and rehearsed in detail. An officer—usually the battalion commander or a senior member of his staff—was present at these rehearsals. He didn't just sit and listen but, being familiar with the battalion's standards of performance, corrected the instructor in platform delivery, mannerisms, diction, presentation, organization of subject, and so on. The reaction of noncommissioned officers to this treatment was surprising. They relished the added responsibility we placed on them and took real pride in meeting required standards. I'll admit they didn't become thoroughly competent overnight, but over a period of a few months they showed marked improvement not only in instructing troops but in all other aspects of leading their men. I recommend our methods to those distressed by the dissatisfaction about noncommissioned officers voiced by Colonel A. S. Collins in *ARMY* in January.

It was not an easy task, but the results were certainly gratifying to both officers and noncommissioned officers. We felt our noncommissioned officers became many times more effective after their experience, and so did they. It seems to me our noncommissioned officer corps is not much different from their forebears of the early 1940s, so far as ability is concerned. No doubt they must know much more about many more things than their predecessors did. Therefore they require more supervision and assistance to make them proficient in the many phases of their jobs.

Lieutenant Colonel Richard J. Byrne, Infantry, *was commissioned in the Massachusetts National Guard after graduating from its Military Academy in 1940. Since 1941 he has been on active duty as platoon, company and battalion commander, regimental executive, and in staff assignments up to army and theater level. He is now at the U. S. Army Security Agency Training Center, Fort Devens, Mass.*

GIVE THE CORPORAL BACK HIS SQUAD

LT. COL. GEORGE JUSKALIAN

WHY work up to become a company commander when you can get to be a captain simply by leading a platoon? That's not a valid question, because everyone knows you can't become a captain simply by leading a platoon.

A similar question that is being bandied about these days *is* valid: Why work up to become a company first sergeant—or regimental or battalion sergeant major—when you can get to be a master sergeant by becoming the No. 2 man (to the platoon leader, that is) in a platoon?

The solution, from what I read and hear, is to take care of noncommissioned officers who occupy truly top-notch positions of responsibility by superimposing two additional grades (E-8 and E-9) on the present structure.

This sort of thing has done more in the past fifteen years or so than anything else to sap the prestige of the noncommissioned officer corps. It's sheer inflation that does not enhance the prestige of the corps. It has exactly the opposite effect: it debases and devalues.

I recall that early in World War II there were fewer than a half dozen master sergeants in the infantry regiment. One of these was that walking edition of Army regulations and customs of the service, a paragon of prestige: the regimental sergeant major.

Today the infantry regiment has more than a hundred master sergeants, including the regimental sergeant major and all the platoon sergeants. Are our platooon sergeants of the same caliber as the RSM or the BSM or the company first sergeant? How can they be? If you print a lot of paper money you can't expect its value to hold up.

To jump from something like half a dozen master sergeants to over a hundred is like increasing to twenty colonels. What would you do with all *that* rank? The same thing that has been done with the master sergeants. They'd be spread through the various elements and, for lack of better places to assign them, some would doubtless end up commanding com-

panies. You may say the suggestion is ridiculous. Of course it is, but so too is the very real situation we have faced for the past fifteen years with respect to noncommissioned officers, from master sergeant all the way down.

Fifteen years ago all noncommissioned officers, from corporal to master sergeant, invariably were referred to as a single group: the noncommissioned officer corps. Each member of that select group was clothed in prestige. Today, the expressions "first-two-graders" and "first-three-graders" are common in policy papers bearing on privileges and prestige for noncommissioned officers. In other words, corporals now are next to nobodies, and sergeants only once removed.

The inflation mentioned earlier brought in its wake two evils. One was the flood of higher-grade noncommissioned officers, already touched upon. The other was a natural consequence of the first: the lower grades were robbed of their responsibilities—so much so, in fact, that the corporal now really has none. He doesn't lead the rifle squad, and hasn't for a long time. Neither does the lowly sergeant. That job now goes to the second-highest-ranking noncommissioned officer in the hierarchy—the sergeant first class. In short, real responsibility has been cut from the lowest two grades.

Now we hear talk about adding two grades at the top. This could ultimately lead to the SFC and the PFC becoming practically equals, the only real difference being a matter of pay.

More inflation is not the answer; deflation is what's needed.

Instead of creating two more grades, let's start at the bottom and make our present noncommissioned officers leaders in the true sense of the word. It should be axiomatic that the lowest rating should be the proper leadership grade for the smallest type of unit; that is, squads should be led by corporals (let the best PFC in the squad be his assistant) and sections by sergeants. Platoon sergeants should be sergeants first class, and company first sergeants and sergeants major should be master sergeants.

I realize that a reversion to something like the structure that existed early in World War II would, if adopted without adjustments, mean a lot of administrative demotions and pay cuts. However, I think the former, although painful at the outset, would in the long run result in greater prestige to the noncommissioned officer corps. As for pay cuts, far be it from me to advocate any real loss for anyone. I would suggest that pay scales be adjusted so that, for example, the pay of an SFC who is now a squad leader and who would be administratively demoted to corporal, would still be the same. I would recommend that those demoted clear out of the noncommissioned grades continue to draw the pay of their previous grades. Eventually such men would either regain lost grades or leave the service. Finally, normal attrition would right the situation. Paying a man for responsibilities he no longer shoulders would be costly, but it would be decidedly less costly than creating two new super-grades.

Give the corporal back his squad and the problem of noncommissioned officer prestige will disappear.

Lieutenant Colonel George Juskalian, Infantry, *who has contributed several articles to this magazine, commanded a battalion of the 32d Infantry in Korea, did a hitch in the Pentagon, and is now with the 4th RCT at Fort Devens, Mass.*

THE SOLDIER'S OUTFIT IS HIS HOME

LT. COL. E. McC. DANNEMILLER

FOR some time *ARMY* magazine has been rightly devoting much space to the subject of *esprit de corps* and those allied with it: unit history, tradition and organization.

It seems, however, that while certain planners are striving hard to develop a system of unit designation and structure that will enhance *esprit de corps* (and through it the over-all efficiency of the Army), others are doing things that tend to break down what *esprit* unit commanders can develop. In so doing, they are developing within the soldier's mind a don't-give-a-damn attitude that reduces efficiency, greatly hampers efforts at promoting reenlistments, and causes much unnecessary confusion (in mail delivery, for example).

In support of this, I cite the capture-the-flag game my old battalion is now playing. Though I am far away, I hear that the men of my former command are to exchange their unit standard, distinctive insignia, painted signs about the unit area, history, traditions, customs, historical paraphernalia, and "unit" line of their mailing address, for like items belonging to another battalion. And that's not all. Within a few weeks, these officers and troopers will again go through the same sort of exchange, when the battalion gets another number.

Why all the number-shuffling and consequent confusion? The "excuse" for such goings-on lies apparently in the Gyroscope of two infantry divisions and the subsequent redesignation of one of them. But although Gyroscope was intended to give a soldier a home and a framework upon which to build his career, as well as to foster his proficiency and morale through a feeling of belonging, the case at hand makes a travesty of this.

Division talk, division conventions and associations, and the natural tendency of very senior officers to look upon (their) divisions as the seat of tradition, have all clouded the issue: the soldier's home is with his barrack mates, and his company is the unit to which he owes allegiance and of which he is proud. His circle of friends extends through the regiment or separate battalion—the unit through which he gets his mail and the other necessities of life, and in which he sees and feels, regularly and frequently, the influence of the Old Man. Above regimental level, these items diminish rapidly in their impact upon the soldier, and a "division *esprit*" seldom flourishes, and only under a commander like the late General Patton. Therefore, a man's ties to his company or battalion or regi-

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ment should be retained to the greatest possible extent. If military necessity dictates, his regiment could and should be transferred from one senior command to another. Since 1917 our divisions have seen their units reassigned as conditions required; there is no need now to maintain rigidly a unit in one division, while transferring all its personnel to another unit, in another division (and maybe *twice*). Reassignment of the unit from one division to another seems to be more logical.

If the planners mean what they preach about the virtues of Gyroscope and their desires to enhance *esprit*, they ought to reverse their decision in the example I have cited. (If one or both steps have already been taken, they should be revoked.) Instead, simply reassign a unit from one division to another. However, the individual soldiers have a right to let their unit be their home, rather than to see it disappear, wraith-like, over the horizon. We know, yet we seemingly refuse to recognize, that a man fights and trains (and conducts himself reasonably or unreasonably in town) with and for his outfit—the men he knows—rather than for "U. S. Army, unassigned," into which too often he is cast. The division's composition can be flexible, but the man's home—his unit —should be stable.

What I have said concerns the combat arms. As for similar problems in the services and in various housekeeping and overhead units, which outnumber the combat elements, I'll leave analysis and argument to those better qualified. I'm sure they too have an interesting and knotty problem to solve.

A unit's tradition, morale, and *esprit de corps* are intangibles that men fight for, since they represent his home and his friends. Instead of tearing them down, as is being done in the example cited, let's use them as tools in building better units in a constantly improving Army.

Lieutenant Colonel Edward McC. Dannemiller, Armor *(USMA 1939), served as liaison officer with British Second Army and with the 3d Armored Division in World War II, and later with the Constabulary in EUCOM. In 1948 he was a UN observer in Palestine, and is now with MAAG, Vietnam.*

INTELLIGENCE IS THE COMMANDER'S RESPONSIBILITY

COL. ROBERT P. HAGEN

INTELLIGENCE, more than ever before, is the commander's responsibility. We all recognize as far-fetched and untenable the attitude of the commander who, in righteous indignation, says, "Intelligence let me down; the enemy surprised us." What he should say is, "I failed to carry out one of my primary responsibilities—directing the collection of intelligence and then using it." These are responsibilities no commander can turn over to his G2 or S2.

Only the commander can determine what he wants to know. Assisted by his staff, mainly his intelligence staff officer, he must generally direct the gathering of this information. Finally, only the commander can fully use the results of the intelligence produced by his command. Too frequently he allows his G2 to decide what he, the commander, wants to know about the enemy. One way in which this can happen is for the commander to permit his G2 to determine the Essential Elements of Information. Although G2 may phrase these EEI, the commander must decide what they should contain.

Similarly, once his various reconnaissance and intelligence agencies have produced items of intelligence, the commander himself must decide what value to give the information presented by his G2. The catch-all "calculated risk" must never be used as an excuse for ignoring the intelligence produced or for failing to adjust operations to fit the approved intelligence estimate. Intelligence should guide the commander in making his decision, and not serve only as the basis for a paragraph of his field order or estimate.

Unfortunately, intelligence has some built-in obstacles. One is that intelligence is an intangible or nebulous quantity. We can never marshal our information and estimates to arrive at an orderly statement of unassailable facts. Because of the nature of intelligence, we must deal in "capabilities," "probable courses of action," "intentions," and "probabilities." This gives intelligence officers a reputation for overqualifying comments by "if," "may," "possibly," and so on. Of course, some intelligence staff officers overdo this weaseling to a ridiculous extent. However, no one has the clairvoyance to be able to say without qualification that the enemy *will* do this or that. The best we can say is that he *probably* will follow this course of action because we observed him to act in a similar manner in a previous situation.

Another built-in obstacle is the fact that only the intelligence officer needs a war to test his efficiency. The logistician can count, move, store and issue supplies during peacetime, either in garrison or during field exercises. The G3 can move troops, prepare orders, supervise training, and plan in peace as well as in war. The G1 and the comptroller are well occupied always in accounting for personnel and funds, equally real during peacetime as well as in combat. But the G2, no matter how much we employ Aggressor and other realistic maneuvers and training aids, in peacetime never operates in the everyday atmosphere of his fellow staff officers. No Aggressor force always acts exactly as a real enemy would. It is well nigh impossible to make troops practice realistic self-censorship, security precautions, and evasion measures during maneuvers. Our training periods are so short that we must necessarily concentrate on learning to perform any skill or maneuver. We have little time for learning how a potential enemy performs these same tasks and maneuvers. Most of us have difficulty keeping up with our own weapons, with little time left for learning to identify comparable enemy matériel.

AROUND THE WORLD WITH SIKORSKY HELICOPTERS

ARCTIC STUDIES—The only access to this arctic research outpost in Northern Greenland is by helicopter. The Red Rock Camp, Nunatarssuag, established by the U. S. Army's First Engineer Task Force to carry out ice cliff studies, receives food, mail, and passengers by Sikorsky S-55, designated H-19 by the Army. The versatile S-55 is an arctic veteran. It has seen grueling service in Greenland, Northern Canada, and Alaska.

ASSAULT EXERCISE—Marines at Camp Pendleton, California, launch a helicopter-borne vertical assault as a feature of a recent major exercise involving 15,000 men. A Marine Corps HRS, an S-55 type, is shown above after landing its assault troops. The Marine Corps also flies larger HR2S and HUS Sikorsky helicopters.

HELICOPTER HISTORY

FIRST TRANSATLANTIC FLIGHT

In July, 1952, two U. S. Air Force Sikorsky H-19s touched down at Prestwick, Scotland, after a record-making 920-mile flight from Iceland. This was the longest leg in the first and only helicopter flight across the Atlantic, from Westover Air Force Base to Wiesbaden, Germany. The pilots were Capt. Vincent H. McGovern and Lieut. Harold W. Moore.

SIKORSKY AIRCRAFT
BRIDGEPORT, CONNECTICUT
One of the Divisions of United Aircraft Corporation

Possibly a third obstacle to improved intelligence operations is the reluctance of many line officers to seek G2 assignments, partly because of the intangible nature of the material with which G2s work and partly because of the prevailing belief that the road to stars goes through the commander-G3 channel. Another reason is that intelligence, representing a wide variety of required skills and techniques, has some "characters" or "odd-balls." Some of these people are "odd" only in that they speak one or more foreign languages. Others are considered unusual because they have a greater degree of specialized knowledge. Still others are probably refugees from more exacting jobs where results are measured daily and not estimated against the time when we will meet a real enemy.

Most of our leaders believe we will win any future conflict only if our intelligence functions are superior to the enemy's. The winning commander will be the one who capitalizes on his adversary's mistakes. In an atomic war we will have neither a quantitative nor a qualitative advantage in men or matériel. As one general officer said, "The way to beat this atomic business is to find out where the enemy is and dump a load on him, and then not be there when *he* dumps a load." Of course this is another way of saying we must have both good intelligence and good counterintelligence. The only way we can attain them is through that command support which causes each commander to realize that he—not his G2—is responsible for timely and accurate intelligence, and that the G2 or S2 is merely his *staff* assistant.

Colonel Robert P. Hagen *was commissioned in the Infantry from the ORC in 1938. He is a graduate of Leavenworth and the Army War College, and is now on the staff of USCONARC.*

GONE ARE THE DAYS

LT. COL. KENNETH T. BARNABY, JR.

HAVING just been on the receiving end of a bill from the Army Finance Center to the tune of $26.27 for shipping charges from Memphis to Washington on a 400 pounds overweight in my household goods, it occurs to me that the joint travel regulations might need a bit of bringing up to date. I am aware of the difficulties involved in such action, but I am thinking in terms of a change in concept rather than procedure.

As a lieutenant colonel, married, with two dependents, I am authorized 10,000 pounds gross weight, not including military books. In looking around my modest household, I see that our possessions are in no way comparable to those of our civilian friends. As a matter of fact, they are less than those of our friends in the military. We don't own a kitchen range, refrigerator, three-way radio combo, or power tools. We fit into a three-(small)-bedroom house with no surplus equipment to store, and the feeding of more than six or seven guests requires a foraging expedition throughout the neighborhood for additional crockery. Hardly excessive! Why, then, the $26.27 chit?

Several factors enter into this. In the first place, back in the good old days, Government quarters were available for officers and married noncommissioned officers. These quarters were partially furnished with dining-room sets, major kitchen items, beds, bureaus, dressing tables, chairs, desk, table and odd chairs for living room or den. There was usually an extra bedroom and bath on the top floor or in the basement, sparsely but adequately furnished. As post residents, engineer facilities were available for maintenance of quarters and lawn, and sometimes the construction of shelving or closets.

A second factor is the disappearance of the domestic servant. In days gone by, that extra room and bath we mentioned was usually occupied by a private and his wife. The private did the lawn-mowing, car-washing and floor-waxing while wife did the household chores, dishwashing, laundry, ironing, and the like. A minimum of cash was exchanged by way of remuneration. Room and board substituted therefor.

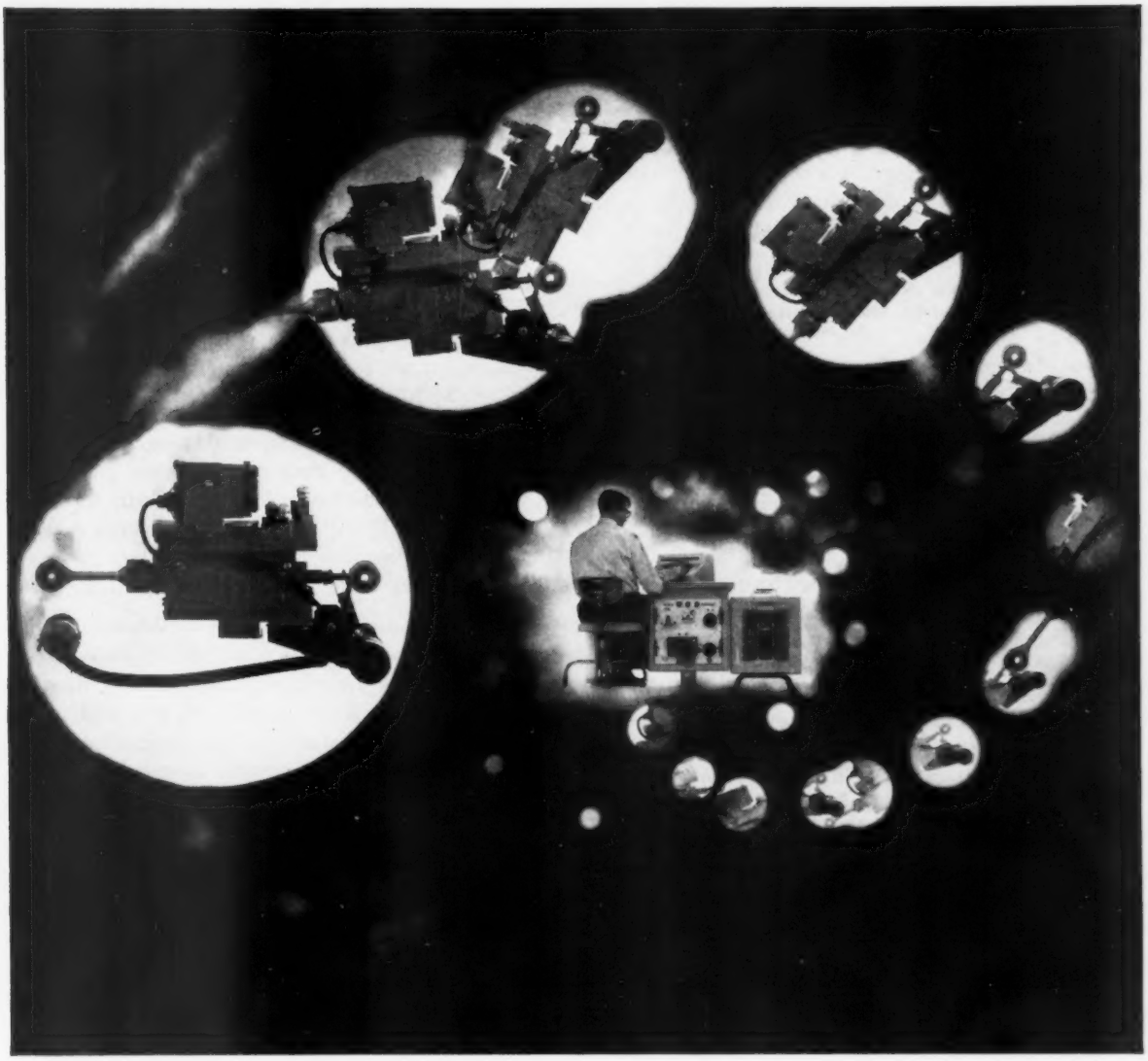
Tied in with all this were the officers' and noncommissioned officers' clubs as the focal point of social life. Playgrounds were scattered about the post. Bicycles, trikes and roller skates were privately furnished, but heavy jungle gyms and plastic pools were not on the T/A of most households. Punch bowls, card tables, poker chips, and the like, were available at the clubs and could be borrowed.

What have we today?

Each family has to haul around a complete set of furnishings instead of the odd lamps, rug or two, and pictures, sofa, and one or two chairs of yesterday. Few, if any, houses one rents or buys today have a room adaptable for domestic help. (Even if there were such a room, there's no help within fiscal reason.) As a result, private and wife have been replaced by a 250-pound dishwasher, a clothes-washer and drier, power lawn-mower, mangle, electric oven, rotisserie, and so on, to the limit of our purchasing power. There are no post engineers other than on posts, so a 75- to 150-pound assortment of saws, hammers, nails, screws, drills and power tools is a must for even the most involuntary and inept do-it-yourselfer. To live even reasonably comfortable we have loaded ourselves down with stuff the Government used to provide, but have had no compensatory adjustment in our weight allowances.

Where do we go from here? There should be developed a sliding scale for household weight based on a number of factors: career pattern, possibly even arm of service, rank, number of dependents, and time in the service. When this is established, take the necessary action either with Congress and/or within the Army itself to amend the joint travel regulations so that there is more realism in the whole program.

Lieutenant Colonel Kenneth T. Barnaby, Jr., Armor, *was an enlisted man before being commissioned in 1942. During World War II he served with a reconnaissance battalion of VI Corps in Africa, Italy and ETO. He is now on duty in the Pentagon.*



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THE MONTH'S READING

The Individual Is Not Obsolete

FRANK ROCKWELL BARNETT
Director of Research, The Richardson Foundation
Address at the Military-Industrial Conference, Chicago
14 March 1957

What of Communist will power? Weapons without will power are like a foreign policy which has no national purpose. Unhappily for us, Communist will—when it is put to the test—seems to be far more resolute than our own. Communist courage—when the battle is joined—reflects discredit on the hollow, superficial phrases with which some Free World statesmen seek to clothe the nakedness of their Cold War policies.

Last spring, Khrushchev denounced Stalin as a sadist and a murderer; but in the fall the same Khrushchev urged all Communists to be like Stalin when fighting capitalist imperialism. In the spring, Khrushchev prophesied before the 20th Assembly of the Communist Church Militant that Marx and Lenin would inherit the 20th century. In the fall, at the height of the Suez debacle, Khrushchev snarled at Western diplomats in Moscow: "Whether you like it or not, history is on our side. We'll bury you!"

Khrushchev risked World War III in November when he threatened to put rockets on Britain and France. Communist China and Communist Russia risked World War III when they offered to send "volunteers" to Cairo. The rulers of the Kremlin looked down the atomic barrels of all the American air bases surrounding their heartland, looked hostile world opinion straight in the face—and sent twenty armored divisions to crush the life out of Hungary. There is something dreadfully wrong with Communist morals—but, by comparison with the West, they enjoy a crucial advantage in courage, will power, resolution and the will to win. By their own standards, they are even *morally* superior to us, for *they* are obviously willing to die for what they believe in.

Some optimists argue that the slaughter of Hungary exposed a terrible weakness in the Communist Empire. Perhaps it revealed an even greater sickness in Western Civilization and especially America. Our society—unlike Communism—is founded on certain assumptions about the moral nature of the universe. If those assumptions are wrong, if there are no sacred obligations, if there is nothing worth dying for, if there is nothing worth risking for—then, of course, the Communists are right; man is an insignificant insect, spinning his pitiful web on a flying ball of meaningless mud. And let us have our creature-comforts, our prosperity and "peace in our time."

I don't really believe that many Americans think that way at all. This Republic has created the most exciting experiment in human liberty and opportunity the world has ever known. Owing to our *unique* legal, political and economic framework, ordinary men and women have had the chance to do quite extraordinary things—for themselves, for their families and for others, including the peoples of all the world. This experiment in human freedom would never have conferred its unlimited benefits on present generations if it hadn't been for two sets of men:

(1) a group of American statesmen who were so "controversial" that they would have been hanged by the neck if their cause had not prospered;
(2) a little band of men from beyond the sea who were equally willing to risk their careers and lives for the American dream—Von Steuben, Kosciusko, Rochambeau and the Marquis de Lafayette.

Two Frenchmen, a German and a Pole betting all they had on a new social order—a way of life that might transform not only the American continent but, in time, the whole world. Can we think of those men and not be somewhat ashamed that our government is afraid to impose moral, political and economic sanctions against the Soviets over the murder of Hungary?

* * *

Western Civilization still has economic strength; it still has skilled manpower; it has science and it has weapons. But does the West any longer believe in itself? Does it have a Grand Purpose or merely a little set of confused and conflicting *ad hoc,* emergency programs? Can we, in short, meet the Communist challenge at the *ultimate* levels of conviction, courage and ideological commitment?

Or shall we continue in the future—as in the past—to fight every battle of the Cold War on *our* side of the Iron Curtain? Shall we forever be locked into the false dilemma of coexistence or containment? No *status quo* power has ever checked the thrust of a dynamic barbarian, for even if the "defense" is ninety per cent successful on every occasion, a civilization can be pushed to its grave ten yards at a time.

The question on Hungary was *not* World War III *versus* doing "next to nothing." There were many things short of war we might have done, if there had been a plan, and if National Will and National Purpose had not faltered. Actually, there were minimum risks in imposing economic sanctions, flying-in unarmed planes loaded with relief supplies, and insisting on UN observers. The worst time of all for the Kremlin to start World War III was during the Suez and Hungarian crises. Hungary meant that none of the sixty satellite divisions were reliable. And Suez had brought United States military power into world-wide alert. Our navy was at sea; our atomic bombers were in the air; our far-flung battle line was "at the ready." For the

Soviets to have risked Total War at such an hour would have been suicide.

* * *

. . . Today, the front is everywhere. Certain intangibles can literally "wash out" the material foundations of Defense. If the world climate of opinion is mobilized against us by propaganda, we will lose markets, air bases and access to strategic raw materials. If, here at home, we lose the will to sacrifice, or cynically disregard our spiritual traditions, all of our physical wealth will not safeguard American Civilization. Today, National Defense begins at the level of domestic political morality, the quality of citizenship training for our youth, and the reputation of American business both here and abroad. These "intangibles" are the clear responsibility of private citizens.

We are assembled here to answer two practical questions:

(1) What needs to be done?
(2) How can government officials, officers, scientists and businessmen, private citizens, voluntary associations, individual corporations, and educational institutions contribute more effectively to National Defense?

* * *

The West, if it is to survive, needs scientists and other scholars who recognize "moral intangibles." We need businessmen who will shoulder their load in politics, public and civic affairs. We need generals who think about Citizenship Education. We need diplomats who understand logistics and the limitations of international law. We need ministers who grasp the realities of the world power struggle. We need more labor leaders with the courage and conviction of George Meany. We need more men like Ben Franklin—men who comprehend statecraft and war, science and business, art, philosophy and religion.

For the next two days, I hope you will play a game of Imagination. Pretend that this hotel ballroom is really the lecture hall of a newly-built Civilian War College, or National Service University. Imagine that you have been sent here by your corporations or colleges or government agencies, as a Cold War General Staff, to hammer out the ideas by which we can frustrate the power-thrust of Genghis Khan without a total war. This is not pure fantasy. For unless America's private energies are committed to the struggle, then it is almost certain that we will be pushed backward step by step into a corner where we will have only one choice: to accept "peaceful coalition" in the World Soviet State—or cremate the earth. We must stay out of that corner. We must avoid that dilemma. We must learn to play on the *chessboard* of the Cold War if we are not to die on the battlefields of a Hot War.

* * *

"What can *I* do about it?" That is the question to which men of good will often find no concrete answer. . . . Each of us can become a Committee of One to make *recommendations* for action—to our Bar Association, to our University Department, to our Executive Committee, to our Board of Trustees. . . .

. . . The Individual is not yet obsolete; it may be that someone in this distinguished audience has within himself the drive and talent to help change the course of history.

The weapons of "morals and politics" can be turned in the other direction. Hungary was crushed, but Hungary proved that young workers, young peasants, young students, could not be brainwashed. There are rumblings in Poland and Czechoslovakia. Some Red Army men went over to the rebels in Hungary. There are stirrings within Russia itself—questions from students, murmurings among scientists, doubts among intellectuals. The Russian people have not lost their religion in nearly four decades of rule by militant atheists.

* * *

We must not expect, however, that the Soviet Empire will conveniently disintegrate by itself. The Communists have worked night and day to dissolve the ties that bind free societies together. They have not "waited for things to happen"; they have *made* things happen. They have trained tens of thousands of professional revolutionaries to wage Psycho-political combat. Communism, moreover, is not just an idea. It is a power-technique. The rulers in Moscow are not going to let their empire fall apart simply because they no longer believe in the validity of Marx.

Since the whole purpose of this Conference is to produce ideas, I should like to conclude with a recommendation of my own. Almost everyone present here today is a *professional*. We believe in professional training in America. We train for engineering and science, we train for business management and philosophy, we train young men at the Service Academies in the complexities of firepower, logistics and military hardware. But in all of America there is no training academy which equips Americans to play Cold War chess with the Communist masters of political warfare. We train diplomats in international *law*, but the Soviets operate outside of law through subversion, infiltration, propaganda and psychological warfare. "Politics" is a dirty word in America—yet in this 20th century of mass communications there is no alternative to politics—except a hydrogen war.

Do we not need a National Service University whose curriculum would be similar to that which you are going to experience in the next two days? The teaching materials in such an academy would also include the strategy and tactics of International Communism. Not that we want Americans to copy the Communists—but we must understand their methods to avoid being "mouse-trapped." The curriculum might also include what could be called the "theology" of freedom, or the Philosophy of Citizenship. We are so busy and so pragmatic that we have forgotten much of our own philosophy. Very few Americans can articulate what it is we stand for. We perform, but performance is not enough. The Communists capture the slogans, manipulate the symbols, pervert the communications. We must produce cadres of Americans in every walk of life who are not paralyzed by the "cult of doubt" and confusion which has swept this country for the past twenty-five years.

Irons in the Fire

Color TV for Missile Tests

The Army Signal Corps has ordered from General Electric a closed-circuit color TV system, to be used for close-up viewing of missile launchings at Cape Canaveral, Fla. This remote-control system will be of critical importance, as in the first few seconds of launching the color of flash and flame spurting from the missile discloses much information as to its flight characteristics and, previously, detailed close-up observation has been impossible because of safety requirements.

One-Man Water Plant

The Corps of Engineers R&D Laboratories have produced a one-man "packaged water plant" which can purify up to 12,000 gallons of water per hour and provide an emergency supply for 50,000 persons. Now under troop test at Fort Belvoir, it is converting highly polluted Potomac River water into potable water within approximately twenty minutes. The all-aluminum plant, designed for field erection, consists of a cone-shaped, 14 feet in diameter, upflow coagulation basin, a strainer, and two gravity sand filters.

QMC Gets Solar Furnace

A giant solar furnace capable of producing temperatures as hot as an atomic explosion is being erected by the Quartermaster Research and Engineering Center at Natick, Mass. The furnace will collect the sun's rays and concentrate them in a small target area. This focus of intense heat will be utilized to test QM materials intended for the protection of military personnel against the thermal effects of nuclear weapons. The furnace is expected to reduce the time and cost of developing heat-resistant materials, although final tests will be made at atomic field trials.

Crowded Air Waves

At a Chicago conference on radio interference reduction, Brig. Gen. E. F. Cook of the Signal Corps Engineering Laboratories, told a military-industrial audience that the interference resulting from increased use of electrical and electronic equipment is impairing the operation of our modern defense systems. He warned that this problem is acute, and that current efforts toward solution have barely scratched the surface. General Cook said that saturation of a tactical or defense area with electronic devices damages the usefulness of such equipment because of electrical interaction. All current procurement specifications for Army matériel include requirements for interference reduction, he said, and the fulfillment of these requirements rests with industry.

One-Man Copter Tested

"Stable Mabel," Kellett Aircraft's rocket-powered one-man helicopter making its public debut in Philadelphia, revealed a high degree of maneuverability and stability, swinging pendulum-like in mid-air and landing with pinpoint accuracy on a truck. This helicopter, weighing 230 pounds empty and 650 pounds in flight, is primarily a test vehicle for Kellett's gyro-stabilizing device, but is readily convertible to military use, in which its present operating range of sixteen miles at 60 mph would be considerably increased.

"Stable Mabel," a rocket-powered helicopter, is demonstrated in Philadelphia.

Contract for H-23D

The Army has awarded Hiller Helicopters a new contract totaling almost $4.80 million for an undisclosed number of three-place H-23D helicopters. This model, one of the H-23 series used by the Army in helicopter training and reconnaissance missions, has a new transmission and drive system, built for 1,000-hour service between overhauls, a 250-hp Lycoming engine, and an entirely redesigned tail-rotor assembly. It is the first helicopter designed according to the Army's concept of achieving lower operating costs over extended periods.

H-23D, redesigned Army helicopter.

Tiny Transistors

General Electric has disclosed the initial commercial production of three newly developed high-frequency transistors. They may possibly be used in TV sets, radar, two-way radio receivers and transmitters, and other equipment previously limited to vacuum tubes.

The tiny transistors contain layers of "p" type germanium, so thin that twenty of them would be required to equal the thickness of the paper on which this is printed. Connections utilize a special wire one quarter the size of a human hair. However, the transistors, hermetically sealed in a welded metal case, can still withstand many times the amount of shock required to render a vacuum tube inoperative.

Souped-up L-23s

Under a new remanufacturing contract, costing approximately $1.71 million, a large number of early models of Army L-23 command transports will be returned to Beech Aircraft Corporation and rebuilt as completely new units. These planes will be stripped down and remanufactured as L-23Ds, powered by 340-hp supercharged Lycoming engines and incorporating all the improvements and advances in performance and construction present in the 1957 production model L-23D which Beech is currently delivering to the Army under a separate $2.8 million contract. The L-23D is the military equivalent of the commercial Beechcraft E-50 Twin-Bonanza.

Army Aircraft Auto Navigator

Lt. Robert D. Fisher, Army Aviator, recently made the first operational flight using the Ryan electronic navigator. Lt. Fisher flew an L-20 DeHavilland Beaver from Ryan's Lindbergh Field in San Diego, Calif., to Fort Huachuca, Ariz., a distance of some 793 miles, on course all the way. At no time did he use ground navigational aids, but relied entirely upon his automatic navigator to provide continuous information as to his exact position, his course, and the distance already flown.

Army Aviation expects the Ryan automatic navigator to:

(1) Increase the flexibility and operation capabilities of Army planes in their combat role;

(2) Reduce requirements for complex aircraft control systems;

(3) Free personnel previously needed for installation, repair and operation of ground stations;

(4) Reduce vulnerability to attack by removing radio guide beams that might be used as a target approach by enemy planes.

Use of such navigation devices will permit the establishment between airfields of noninterfering, uncongested aerial highways, in contrast to the present single, crowded radio navigational track.

QM's new fifty-man cookset.

New Cabinet Cookset

Army Quartermaster Corps has designed and tested a new cabinet cookset capable of feeding fifty men and needing only eleven repair parts. This model will replace the field range now in use. It utilizes aluminum and non-critical corrosion resistant steel to afford a cost saving of approximately $50 per unit and a weight reduction of twenty three pounds.

Nike Control Trailers

Under subcontract from Western Electric, Fruehauf Trailer Co. will build a number of truck-trailer units for ground handling and housing control equipment for the Army's Nike missile program. The trailers on the subcontract will total about $5 million. Fruehauf has also received a subcontract totaling more than $1.3 million from Utica-Bend Corp. for the construction of more than six hundred 12,000-gallon gasoline truck tanks for the armed services.

Flying Crane

Helicopter versatility was proven again at Fort Bragg when a disabled Army L-19 was lifted fifteen miles by an H-21. The crippled L-19 was securely fastened in a sling on the belly of the huge helicopter. Wooden baffles were placed on the plane's wings to prevent air currents from making it buck up and strike the helicopter.

Camera Records Missile's Flight

Guided-missile tests cost up to a quarter of a million dollars apiece, and a reliable record of each one is vital. A camera eye for checking guided-missile performance at the target is being manufactured by Bell & Howell, under a Navy contract.

This equipment consists of pods, each containing four cameras, which are mounted on the wing tips of a target drone and give complete spherical coverage of the missile's flight as it approaches. The cameras have a 200-foot film capacity, sufficient to cover as many as four missile passes with ten-second remote-controlled film "bursts." They perform efficiently at velocities just short of the sound barrier, at altitudes of from 5,000 to 50,000 feet, and at temperatures as low as 65 degrees minus. When the target is hit, the pods are jettisoned by explosive charges and are lowered safely to earth by self-contained 16-foot parachutes.

Missile Scoring Pod with cover removed.

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The Association of the U. S. Army shall be an organization wherein all who are in accord with its objectives may join in the exchange of ideas and information on military matters, and in fostering, supporting, and advocating the legitimate and proper role of the Army of the United States and of all its elements, branches, and components and providing for and assuring the Nation's military security.

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Membership

General Membership. General membership in the Association shall be open to any individual who has been honorably discharged or retired from the Armed Forces of the United States, to members of the National Guard of the United States not on active duty, to members of the United States Army Reserve not on active duty, and to such persons as have held appointive office in the Department of the Army.

Service Membership. Service membership in the Association shall be open to all active-duty members of the Army of the United States.

Cadet Membership. Cadet membership in the Association shall be open to the cadets of the United States Military Academy and to all current enrollees in Junior, Military Schools, and Senior Divisions of the Army ROTC Program, including those units provided for by Section 55c of the National Defense Act as amended.

Associate Membership. Associate membership shall be open to active-duty personnel of the other services, to civilian employees of the Department of the Army not qualified for General Membership, and to any individual who supports the objectives of the Association and who meets such requirements as may be promulgated in regulations passed by the Council of Trustees.

Sustaining Membership. Sustaining membership shall be open to such industrial, commercial, business, professional, technical and veteran firms, corporations, organizations or societies that wish to support the aims and purposes of the Association, subject to specific approval by the Council of Trustees.

REPORT FROM YOUR AUSA CP

The print order for this issue of *ARMY* is 63,000. We hope that this will be adequate to meet our increasing membership.

The 24th Infantry Division sent in 110 memberships in one packet.

Sergeant Frank D. Rough, Battery A, 377th AAA Battalion, at Meadville, Pa., was awarded his membership because he was selected as the "Best Soldier—1957" in his unit.

Sergeant Charles Spencer, Company D, 35th Tank Battalion, also won his membership in the Association upon graduation from the NCO Leadership Course at Fort Knox by being the Honor Graduate as well as the top man in Leadership. He is the only man in the history of the school who has received both awards. Our heartiest congratulations!

The Association's study of problems of national defense, *The Security of the Nation,* has received much publicity—most of it favorable. Copies are in great demand.

Of the 111 commercial exhibit booths available for our Third Annual Meeting, eighty-five have been sold at this early date. The Arrangements Committee under Gen. John Dahlquist is hard at work on the program. If you haven't circled the dates for the meeting, put a ring around 28-29-30 October for your visit to Washington.

Another tangible sign of AUSA growth has been the steady increase in the number of pages in this magazine. In 1951, the first full year of the combined publication, we published 656 pages. By 1955, the figure rose to 776 pages. Last year, we published 856 pages, and for the first four months of 1957 we are running 48 pages ahead of 1956. Over the same period the number of copies printed has risen from 27,000 to 63,000.

Congratulations to Major Harry V. Davis, Headquarters Iowa Military District, who received an Association Medal for being the honor graduate of the Associate Antiaircraft Artillery Officer Advanced Course ending 26 March 1957. Presentation was made by Col. Julian S. Albergotti, acting for the Commandant of the AAA&GM School.

WALTER L. WEIBLE
Lt. Gen., USA-Rtd.
Executive Vice President

AUSA REGIONAL ACTIVITIES

CHAPTERS

ALBUQUERQUE CHAPTER

Secretary: Lt. Col. James M. Keating, Rtd., P.O. Box 1689, Albuquerque, N. M. *President:* Col. Benjamin T. Rogers, Rtd.; *First Vice President:* Col. Charles K. Dillingham, Rtd.; *Second Vice President:* MSgt Vernon E. Kerr, USAR; *Treasurer:* Capt. Vance Mauney, USAR.

Last reported meeting appointed chairmen of the following committees: Awards, Public Relations, Speakers, Legislative, Program, Army Day. Dr. Francis M. Kercheville has been appointed Chaplain.

CAMP IRWIN CHAPTER

First Vice President: Lt. Col. David D. Fleming, Comptroller Section, U. S. Army Garrison (6019-01), Camp Irwin, Calif. *President:* Col. James W. Bidwell; *Second Vice President:* MSgt Clair A. Hunt; *Treasurer:* CWO Tom D. Dials.

COLUMBUS-FORT BENNING CHAPTER

Secretary: Col. S. S. Sogard, Adjutant General's Section, Fort Benning, Ga. *President:* Mr. T. G. Reeves; *First Vice President:* Mr. J. W. Woodruff, Jr.; *Second Vice President:* Lt. Gen. Manton S. Eddy, Rtd.; *Treasurer:* Lt. Col. Edward D. Fitzpatrick.

THE COOK COUNTY CHAPTER

President: Col. Jules V. Houghtaling, USAR-Rtd., 1787 Clifton Ave., Highland Park, Ill. *First Vice President:* Col. Walter L. Furbershaw, USAR-Rtd.; *Second Vice President:* Col. Joseph Triner, USAR-Rtd.; *Secretary:* Lt. Col. Herbert Moselle, USAR; *Treasurer:* Lt. Col. Olin C. Tyler, USAR.

DES MOINES CHAPTER

Secretary-Treasurer: Major Clyde Putnam, 720 Des Moines Bldg., Des Moines, Iowa. *President:* Col. Harold E. Pride; *First Vice President:* Lt. Col. Willard Hayne; *Second Vice President:* Lt. Col. William Leachman.

DETROIT CHAPTER

President: Maj. Gen. Gordon A. MacDonald, NGUS, 14451 Stahelin Ave., Detroit 23, Mich. *First Vice President:* Col. T. S. Cawthorne, USAR; *Second Vice President:* Mr. Clifford O. May; *Secretary:* Mr. Harold J. Miller; *Treasurer:* Mr. Robert Bruce.

EL PASO CHAPTER

Secretary: Mr. C. William Wakefield, 809 Mississippi, El Paso, Tex. *President:* Dr. Hervey W. Dietrich; *First Vice President:* Mr. Richard W. MacCarthy; *Second Vice President:* Mr. L. T. Vice; *Treasurer:* Mr. George E. Rawson.

FORT DEVENS CHAPTER

Secretary: Capt. R. S. Moriarty, 4th RCT, Fort Devens, Mass. *President:* Col. Fred L. Walker; *First Vice President:* Lt. Col. Robert C. Harris; *Second Vice President:* Maj. Glenn N. Mayo; *Treasurer:* Major Margot Reis.

FORT HOOD CHAPTER

Secretary: MSgt Maurice N. Madison, G4 Section, Bldg. 2225, Fort Hood, Tex. *President:* Brig. Gen. Roland H. del Mar; *First Vice President:* Col. W. G. Merriam; *Second Vice President:* Col. J. F. Delaney, Jr.; *Treasurer:* Capt. M. M. Gentry.

FORT LEONARD WOOD CHAPTER

Secretary: Lt. Col. George A. Rigely, Building 401, Fort Leonard

FT. BENNING, GA. Mr. H. M. Milton II, Asst. Secretary of the Army, and Maj. Gen. Herbert B. Powell, Commandant of the Army Infantry School, at the charter ceremony of the Columbus-Ft. Benning Chapter of AUSA.

PHILADELPHIA, PA. Dr. William J. Kroeger, *left*, newly elected president of the Frankford Arsenal Chapter, AUSA, receives the chapter's charter from Lt. Gen. Walter L. Weible, USA, Ret., executive vice-president of the Association, as Brig. Gen. Joseph M. Colby, Commanding General of the Arsenal, looks on.

AUSA on the March

SACRAMENTO, CAL. Members of the new Mother Lode Chapter of AUSA met at the U. S. Army Signal Depot to hear Lt. Col. Leon J. Fishkin, Chief, Office of Technical Liaison, Office of the Chief Signal Officer. Seated on the platform are, *left to right*, E. A. Combatalade, Col. Stuart M. Welsh, Commanding Officer, Signal Depot; Brig. Gen. A. M. Shearer, Ret., president of the chapter; Col. Fishkin, George Holt and William L. Shaw.

EL PASO, TEX. Dr. Hervey Dietrich, president of the El Paso Chapter of AUSA, accepts the charter from Mr. John Baretta of San Antonio, Texas, aide to the Secretary of the Army.

FORT POLK, LA. Maj. Gen. R. L. Howze *(center)*, recent Ft. Polk and 1st Armored Division commander, presents the charter of the Polk Chapter of AUSA to the chapter president, Mr. F. E. Hernandez. Specialist First Class F. B. Ross *(left)* is a member of the chapter.

Wood, Mo. *President:* Maj. Gen. William C. Baker, Jr.; *First Vice President:* Mr. Dru Pippin; *Second Vice President:* Col. George A. Meidling; *Treasurer:* Lt. John W. Shannon.

FORT RILEY CHAPTER

Executive Secretary: Lt. Col. Kenneth I. Boggs, Room 221, Patton Hall, Fort Riley, Kans. *President:* Mr. John D. Montgomery; *First Vice President:* Mr. Ralph Warcham; *Second Vice President:* Mr. Charles S. Arthur; *Secretary:* Mr. Blair D. Adam; *Treasurer:* Mr. Ed J. Rolfs, Jr.

FORT SHERIDAN CHAPTER

Secretary: MSgt James L. Norris, Fort Sheridan, Ill. *President:* Lt. Col. Warren J. King; *First Vice President:* Maj. Dale E. Williams; *Second Vice President:* Mr. Donald Y. McKay; *Treasurer:* Mr. I. M. Henry.

FRANKFORD ARSENAL CHAPTER

Secretary: Mr. Reuben Levine, Frankford Arsenal, Philadelphia 37, Pa. *President:* Dr. William J. Kroeger; *First Vice President:* Mr. Harry F. Devlin; *Second Vice President:* Mr. George S. VanDyke, Jr.; *Treasurer:* Mr. Kenneth E. Yocum.

Above slate of officers elected 7 March to replace the provisional officers who organized the chapter. Chartering meeting 13 March received widespread publicity in the Philadelphia papers, had attendance of over 400 military and civilians.

GARRY OWEN CHAPTER

Secretary: Capt. Harry W. Rollins, Hq 7th Cavalry Regt., APO 201, San Francisco, California. *President:* Lt. Col. William T. Rogers; *First Vice President:* Major Bruce S. Eldridge; *Second Vice President:* Capt. James T. Cecka; *Treasurer:* 1st Lt. Ronald R. Berkey.

Geographical area: those portions of Honshu, Japan, designated as Regional Camp Otsu with Hq at Camp Otsu, Honshu, Japan.

HENRY LEAVENWORTH CHAPTER

Secretary: Maj. John H. Cushman, Fort Leavenworth, Kans. *President:* Col. Raymond L. Shoemaker, Jr.; *First Vice President:* Lt. Col. William D. McDowell; *Second Vice President:* Lt. Col. Wallace C. Magathan; *Treasurer:* Lt. Col. D. Martin.

HONOLULU-FORT SHAFTER CHAPTER

President: Col. Alexander D. Surles, Jr., Hq U. S. Army Pacific, APO 958, San Francisco, California. *First Vice President:* Lt. Col. Emmet L. O'Connor; *Second Vice President:* Lt. Col. Arthur J. Pancock, USAR; *Third Vice President:* Lt. Col. Robert L. Stevenson, NGUS; *Secretary:* Major Charles D. Flinn; *Treasurer:* Lt. H. H. Sackett.

Geographical area: Territory of Hawaii.

INDIANA CHAPTER

President: Brig. Gen. Wendell C. Phillippi, NGUS, Hq 38th Infantry Division, 711 North Pennsylvania St., Indianapolis 4, Indiana. *First Vice President:* Col. John C. Carvey; *Second Vice President:* Brig. Gen. John W. McConnell; *Secretary:* Col. Harsel Harris; *Treasurer:* Major Alfred F. Ahner.

Geographical area: entire state of Indiana initially, except that portion of the state within a circle with a radius of 50 miles, with its center at Fort Knox, Kentucky.

KENTUCKIANA CHAPTER

Secretary: Capt. John C. Burney, C/O General Delivery, Fort Knox, Kentucky. *President:* Col. George M. Chescheir, Rtd.; *First Vice President:* Maj. Gen. Paul A. Disney; *Second Vice President:* Lt. Col. Julio Chiaramonte; *Treasurer:* Capt. Wilbur T. Whitehead.

Geographical area: a radius of 50 miles of Fort Knox, Kentucky, embracing an area of northern Kentucky and Southern Indiana recognized as Kentuckiana.

Maj. James H. Leach and MSgt. Frederick L. Shawhan were largely responsible for laying chapter groundwork. New election will be held during April after charter presentation ceremony.

LAWTON-FORT SILL CHAPTER

Secretary: Maj. Rawlins M. Morris, P.O. Box 84, Lawton, Okla. *President:* Mr. George Page; *First Vice President:* Mr. Milton Worley; *Second Vice President:* Mr. Floyd Zook; *Treasurer:* Brig. Gen. John F. Bird, Rtd.

MILWAUKEE CHAPTER

Secretary: Mr. George Comte, 720 E. Capitol Drive, Milwaukee, Wisconsin. *President:* Brig. Gen. Don E. Carleton; *First Vice President:* Mr. G. M. Taylor; *Second Vice President:* Mr. Roth S. Schleck; *Treasurer:* Mr. Frank X. Mages.

Geographical area: Milwaukee, Racine, Waukesha, Washington, Ozaukee, and Sheboygan Counties in the State of Wisconsin.

MONTEREY COUNTY CHAPTER

President: Col. Allen Griffin, Rtd., *Monterey Peninsula Herald*, Monterey, Calif. *First Vice President:* Mr. Joseph Juri; *Second Vice President:* Gen. Robert B. McClure, Rtd.; *Treasurer:* Col. Frank A. Heywood; *Secretary:* Mr. Richard Bennett.

First quarterly meeting held 26 March. "Operation Jabber," filmed at the Army Language School, and "The Mission of the U. S. Army," featuring Gen. Maxwell D. Taylor, were shown. Brig. Gen. John D. F. Phillips, Commanding General, 5th Division Artillery, spoke on the need for public understanding of the Army's position in our national life, and indicated the members of the chapter must "go forth and tell the Army's story." The Naval Line School has offered the chapter use of dining room facilities for future meetings.

MOTHER LODE CHAPTER

Secretary-Treasurer: Mr. William L. Shaw, 3701 College Ave., Sacramento, Calif. *President:* Brig. Gen. A. M. Shearer, Rtd.; *First Vice President:* Mr. E. A. Combatalade; *Second Vice President:* Mr. George E. Holt.

PIKES PEAK CHAPTER

Secretary: Col. Henry I. Szymanski, P.O. Box 2442, Colorado Springs, Colo. *President:* Mr. J. D. Ackerman; *Executive Vice President:* Maj. Gen. Wm. H. Gill; *Vice President for Membership:* Mr. George S. Winters; *Treasurer:* Mr. Samuel T. Jones, Jr.

Geographical area: El Paso, Douglas, Teller, Fremont and Pueblo Counties, Colorado. In the event that another chapter is organized in the city of Denver, Colorado, with a regional area extending beyond the limits of that city, and upon request by the Council of Trustees of the National Association, that portion of the regional area of this chapter lying in Douglas County north of the town of Castle Rock will be ceded to the Denver Chapter.

Chartering ceremonies scheduled for 29 May. Chapter is getting outstanding support from local community, with commercial firms competing for 100% employee membership. Goal is 5,000 charter members by chartering date.

POLK CHAPTER

Secretary: Lt. Col. John W. Rodgers, Fort Polk, La. *President:* Mr. F. E. Hernandez; *First Vice President:* Mr. P. Hoyt Hays; *Second Vice President:* Mr. Albert J. Carter; *Treasurer:* Mr. J. R. Monk, Jr.

Maj. Gen. R. L. Howze presented charter 8 March. Maj. Gen. William Gillmore, Commanding General III Corps and deputy director of Exercise KING COLE, spoke on changing weapons and tactics, but pointed out that man does not change; there will be a need for an army as long as there are wars. "The only way you win a battle or a war is by taking over the area, the real estate you want, and occupying it with men. The only way that can be done is with the army."

SAN FRANCISCO CHAPTER

Secretary: Col. C. C. W. Allan, Office of the Deputy Chief of Staff, Hq Sixth Army, Presidio of San Francisco, California. *President:* Mr. Frederick M. Fisk; *First Vice President:* Lt. Gen. Claude B. Ferenbaugh, USA-Rtd.; *Second Vice President:* Mr. William M. McNabb; *Treasurer:* Mr. Albert Leslie.

Geographical area: San Francisco, San Mateo, Marin and Sonoma Counties.

WASHINGTON STATE CHAPTER NO. 1

Secretary: Maj. Joseph A. Cherry, c/o G1 Section, Hq 4th Infantry Division and Fort Lewis, Fort Lewis, Wash. *President:* Col. James Stack, Rtd.

WOLTERS CHAPTER

Corresponding Secretary: Capt. John J. Peterson, Office of the Provost Marshal, Camp Wolters, Tex. *President:* Mr. Fred Brown; *First Vice President:* Mr. Harry Hopkins; *Second Vice President:* Mr. Orval W. Shore; *Third Vice President:* Col. John L. Inskeep; *Recording Secretary:* Mr. Malcolm Maupin; *Treasurer:* Mr. I. R. Preston.

Miss Gerry Hartman, Army daughter, and SMU student, has been asked to represent the Wolters Chapter of AUSA as well as Camp Wolters itself as fiesta queen in San Antonio during April. The chapter is working closely with local civic organizations, and is taking a large part in the Armed Forces Day activities at Camp Wolters.

ROTC COMPANIES

CITADEL COMPANY

The Citadel, Charleston, S. C.

Captain: Cadet Edwin C. King; *First Lieutenant:* Cadet Terry D. Cordell; *Second Lieutenant:* Cadet Charles M. Watson, Jr.; *First Sergeant:* Cadet Jimmie E. Jones, Jr.

DAKOTA COMPANY

North Dakota Agricultural College, Fargo, N. D.

Captain: Cadet Barrett A. Johnson; *First Lieutenant:* Cadet James L. Young; *Second Lieutenant:* Cadet Gerald E. Stock; *First Sergeant:* Cadet Ronald L. Nelsen.

DICKINSON COLLEGE COMPANY

Dickinson College, Carlisle, Pa.

Captain: Cadet Wilbur M. Otto; *First Lieutenant:* Cadet Fred Conrad; *Second Lieutenant:* Cadet William Rogers; *First Sergeant:* Cadet Dick Shafer; *PIO Sergeant:* Cadet Bill Black.

Above officers installed 22 March. At same meeting, Capt. Paul Jordan, of the Army War College, spoke on "The Life and Adjustments to be made by the Young Army Officer and His Family."

DUQUESNE UNIVERSITY COMPANY

Duquesne University, Pittsburgh 19, Pa.

Captain: Cadet James King; *First Lieutenant:* Cadet John Vensel; *Second Lieutenant:* Cadet John Sullivan; *First Sergeant:* Cadet Alfred Eisenacher.

EDMUND R. WALKER COMPANY

University of Connecticut, Storrs, Conn.

Captain: Cadet Frank Dion; *First Lieutenant:* Cadet Ludias Bajorinas; *Second Lieutenant:* Cadet Howard Belinsky; *First Sergeant:* Cadet Richard C. Swain.

The March meeting program included election of the above officers, and a program presented by the Seniors on Summer Camp. Major Johnson exhibited slides of last year's Camp.

ILLINI COMPANY

University of Illinois, Champaign, Illinois.

Captain: Cadet Thomas P. Luker; *First Lieutenant:* Cadet Daniel R. Barry; *Second Lieutenant:* Cadet Charles W. Thompson; *First Sergeant:* Cadet Jimmy D. L. Roan.

JOHN CARROLL UNIVERSITY COMPANY

John Carroll University, Cleveland 18, Ohio

Captain: Cadet Thomas Halloran; *First Lieutenant:* Cadet Ronald Brill; *Second Lieutenant:* Cadet George Pfeiffer; *First Sergeant:* Cadet Jerry Porter; *Faculty Moderator:* Maj. R. W. Gentleman.

Company is preparing Junior members for Summer Camp, and assembling display for Open House Day.

LOUISIANA STATE UNIVERSITY COMPANY

Louisiana State University, Baton Rouge 3, La.

Captain: Cadet Freddy M. Keegan; *First Lieutenant:* Cadet Bobby K. Bush; *Second Lieutenant:* Cadet Fred C. Dent; *First Sergeant:* Cadet Charles A. Travis.

LOYOLA COLLEGE COMPANY

Loyola College, Baltimore 10, Md.

Captain: Cadet T. McHugh; *First Lieutenant:* Cadet K. Lee; *Second Lieutenant:* Cadet J. Murphy; *First Sergeant:* Cadet L. Romeo.

MOCCASIN COMPANY

University of Chattanooga, Chattanooga, Tenn.

Captain: Cadet Robert H. Webb, Jr.; *First Lieutenant:* Cadet Harold L. Turner; *Second Lieutenant:* Cadet Barry Schwartz; *First Sergeant:* Cadet John F. Crox, Jr.

PENNSYLVANIA STATE UNIVERSITY COMPANY

The Pennsylvania State University, University Park, Pa.

Captain: Cadet George L. Beal; *First Lieutenant:* Cadet Thomas G. Hart; *Second Lieutenant:* Cadet Keith F. Vansant; *First Sergeant:* Cadet Frank H. Morris.

Gen. Charles L. Bolte, USA (Rtd), was speaker at joint meeting of military organizations at Penn State, 2 April. Gen. Bolte, member of AUSA Council of Trustees, drew capacity attendance.

ROBERT E. SYLVEST COMPANY

Northwestern State College of Louisiana, Natchitoches, La.

Captain: Cadet Clifford Deney; *First Lieutenant:* Cadet Jack Freeman; *Second Lieutenant:* Cadet Karl Kammer; *First Sergeant:* Cadet Robert F. Kelley; *Sergeant:* Cadet Lacey Lofton.

Meeting 14 March featured Brig. Gen. Walter B. Yeager, Assistant Division Commander, First Armored Division, who spoke on the place of the Army in national defense. Charter was presented by John S. Kyser, President of the College, to Mr. & Mrs. H. R. Sylvest, parents of the cadet for whom the Company is named. Mr. Sylvest, in turn, presented the charter to Cadet Deney, Captain of the Company.

ST. NORBERT COLLEGE COMPANY

St. Norbert College, West de Pere, Wisconsin.

Captain: Cadet John T. Wilting; *First Lieutenant:* Cadet Raphael J. Hallada; *Second Lieutenant:* Cadet Robert E. Jossart; *First Sergeant:* Cadet James J. Reilley.

TEXAS CHRISTIAN COMPANY

Texas Christian University, Fort Worth 9, Texas.

Captain: Cadet Jerry R. Williams; *First Lieutenant:* Cadet John D. Vaille; *Second Lieutenant:* Cadet Reid H. Bunger; *First Sergeant:* Cadet Noel A. Morrow; *Sergeants:* Cadets Ronnie Coleman, Ruben F. Fechner, Jr., and George F. Hyde.

TCU Company has assumed responsibility for a wide range of extra-curricular military activities, including visits to defense installations, and sponsorship of an annual University-wide convocation of faculty and students relating to the security of the United States. Every cadet had a 20-minute helicopter ride at Camp Wolters. The Company sponsored a visit by the "Gelden Krieger" Drill Team to Galveston's "Splash Day" Festival. Other cadet visits included Fort Hood, Fort Sill, Fort Worth General Depot and District Engineer Office, and to the 249th Tank Bn., Texas National Guard, which gave each cadet a ride in a tank.

UNIVERSITY OF IDAHO COMPANY

University of Idaho, Moscow, Idaho

Captain: Cadet Curtis E. Anderson, Jr.; *First Lieutenant:* Cadet Warren G. Hawley; *Second Lieutenant:* Cadet Gary G. Sturman; *First Sergeant:* Cadet Larry P. McDonald.

VALLEY FORGE COMPANY

Valley Forge Military Academy, Wayne, Pa.

Captain: Cadet Arthur C. Keogh; *First Lieutenant:* Cadet John H. Clark; *Second Lieutenant:* Cadet F. Arthur Rogers; *First Sergeant:* Cadet J. Robert Lance.

WEST TEXAS STATE COMPANY

West Texas State College, Canyon, Tex.

Captain: Cadet John C. Middleton; *First Lieutenant:* Cadet William G. Plummer; *Second Lieutenant:* Cadet James G. Coleman; *First Sergeant:* Cadet Gene E. Glazener.

THE MONTH'S BOOKS

The Race in Education

THE CHALLENGE OF SOVIET EDUCATION
By George S. Counts
McGraw-Hill Book Company, 1957
311 Pages; Index; $6.00

Reviewed by

COL. CHARLES A. H. THOMSON, Infantry, *USAR, who served at SHAEF during World War II. A former member of AUSA's Executive Council, he is on the staff of The Brookings Institution.*

If anyone at this late date in the conflict between West and East is inclined to feel complacent about the current state of the race in education, he ought to take a good look at this book. Even more so, if he feels that the regime of Khrushchev and Bulganin is going to be any less determined than its predecessors to use the full apparatus of party and government to mold Soviet society according to the requirements of communism. For, says Counts: "the basic features of Soviet education reported in the present volume will endure as long as Stalin's pupils . . . hold the reins of power in the Soviet Union. Before any basic transformation can occur, Bolshevism in its central doctrines, purposes, and practices will have to be repudiated. This would mean nothing less than the repudiation of Lenin and Leninism."

The all-inclusive operational meaning of Bolshevist concepts of education is set forth in its full sweep. The general outlines are broadly familiar to the educated person in the West. But Counts shows us how current educational practice is rooted in the earlier Russian revolutionary philosophy of Zaichnevsky, Tkachev and Nechaiev, and shows in detail how that tradition, accepted and embellished by Stalin, has won out over the liberal and decentralized concepts that enjoyed brief sway in the 1920s.

The goals of Soviet education remain the achievement of the central tasks of revolution and Lenin's plan for building communism in backward Russia. The basic institution for general education is the complete middle school: a ten-year school for children from seven to seventeen, designed to give to all a common body of skills, knowledge, ideas, values, and loyalties. The design and tasks of the middle school have changed as Stalinism clamped itself on Russia. From helping with the Five-Year Plan and learning about socially useful labor, the object has now become the mastery of knowledge. And that means a good deal more mathematics and science than American pupils get. Centrally prepared textbooks and instructional programs insure that all students experience the same training, and get the same world outlook: the Marxist-Leninist pitch on the deadly struggle between the socialist and the capitalist worlds.

Counts also amasses a lot of data on the political and moral education of the younger generation; the transformation of the intellectual class into servants of the state; the training of specialists; the political education of the people; the re-education of the offender (purges and concentration camps and surveillance); and the political education of the soldier and of the élite. The latter subject mentions in passing the operations of the Special Sections (OO) for Counterintelligence, operating in the three branches, and working closely with the Political Administration. Counts suggests that élite training for the sons of commissars is being fostered because the Party needs quality more than quantity, and is willing to establish flossy boarding schools to get it. He concludes that the Soviets have not weakened themselves by giving education to the people, and thus sowing the seeds of internal dissension. Far from it. They emerge as a more potent threat than ever.

Victory the Hard Way

VICTORY IN PAPUA
By Samuel Milner
Office of the Chief of Military History, 1957
424 Pages; Illustrated; Maps; Index; $6.00

Reviewed by

MAJ. GEN. H. W. BLAKELEY, *retired, who commanded the 4th Infantry Division during World War II and has written a history of the 32d Division, now in process of publication.*

Victory in Papua came hard for the 32d Infantry Division. It came particularly hard for many of its senior officers who were relieved because victory was slow in coming. The story as told in this official history has drama, unity, and many lessons.

As viewed with the detachment possible fifteen years later, the drama was at times a little on the purple side. When things were going badly in Papua, General MacArthur told the corps commander, Maj. Gen. R. L. Eichelberger: "Go out there, Bob, and take Buna or don't come back alive." And, for good measure, he included Brig. Gen. Clovis E. Byers: "And that goes for your chief of staff, Clovis, too." The subsequent relief of numerous commanders inevitably resulted in some deep emotional reactions which are evident even today when the campaign is discussed with its veterans.

The story has unity in that it deals primarily with the experiences of part of one division in a relatively small area over a six-month period. The 32d was, of necessity, fed piecemeal into the campaign. It was not adequately trained or conditioned largely because every time a training schedule had been started, the division was moved. It was, in fact, at Camp Devens, Massachusetts, in process of moving to Northern Ireland when it was ordered to Australia.

Basically, the division's troubles stemmed from the situation in which an unready America was involved in a world war and, specifically, from the necessity of stopping the sweeping Japanese advance toward Australia.

To a degree unique in modern warfare, the Papuan Campaign was infantry. Very little artillery was ever committed. Armor was available only in limited quantities. Air support and naval support were inadequate, to put it mildly. Poor sanitation and lack of food, water, ammunition, evacuation facilities, and communications all contributed to near-defeat. Withdrawal or a stalemate would have been equally disastrous. Victory was the only solution. As has been said, it came hard.

Actually, total battle casualties were not excessive compared to those of other divisions in other theaters in a similar period of time, but non-battle losses were very high and the physical condition of the troops who remained for duty was poor. The 126th Infantry, elements of which began the operation by a march over the Owen Stanley range, ended the campaign with a total strength of 611 officers and men, most of them in poor health.

Battle casualties in the final beachhead operations were, however, high because the infantry was hastily pressed forward with only their own weapons. Even at this stage of the campaign, only a beginning had been made in developing the tactics and techniques of jungle warfare and, as Dr. Milner puts it, "such devices as satchel charges, effective flame throw-

ers, jellied gasoline, all used in later Pacific operations, were not available at Buna."

It is still a sore point with veterans of the Papuan Campaign that MacArthur's headquarters issued a press release at the end of the campaign to the effect that victory was cheaply won because there was no need to hurry the attack and "the time element was of little importance." General Eichelberger commented on this: "Our Allied losses were heavy. . . . I had been told many times of the necessity for speed."

Although Dr. Milner does not mention the points in his summary of the tactical lessons of the campaign, it is evident that two violations of good practice were frequent: one was the direct interference of higher commanders and their staff officers into the affairs of lower echelons; the other was poor organization for combat including some almost incredible mixing of units. It may be argued that both these actions were required by situations which developed. If so, the situations must indeed have been critical.

Air Planner's Experiences

THE CENTRAL BLUE: The Autobiography of Sir John Slessor, Marshal of the RAF
Frederick A. Praeger, Inc.
709 Pages; Illustrated; Index; $7.50

Reviewed by

GEN. CHARLES L. BOLTÉ, *retired, who is a member of AUSA's Council of Trustees and a former Vice Chief of Staff of the Army. He is now Special Assistant to the Chairman of the Board of ACF Industries.*

The timely publication of this volume provides a valuable addition to the contemporary biographies of those who contributed so greatly to the attainment of the free world's victories. It should prove most useful to those who now have, and in the future will have, the burdens of preventing the recurrence of war and the planning for successful cooperation should the catastrophe of war again be forced upon the free world.

It is perhaps inevitable that the confusions, frustrations, and failures which have always marked the opening phases of such great conflicts as World Wars I and II should be lost sight of as time goes on. In the first place, these periods are poorly documented. The pressures of emergencies, rapid expansion of forces, and haste to put things in some sort of order, inescapably subordinate the keeping of records. Moreover, the inexperienced survivors of the early, hectic days are few in number, compared with those who participated in the later periods of a war. Nor are the memories of the early days as pleasant and satisfying as those of the later periods, when victory is in sight.

Nevertheless, it is imperative that those who are now, or who in the future shall be, charged with making provisions to insure the safety—and in fact the continued existence—of the free world, should study carefully the troubles with which the periods just before and after the outbreak of war have always been fraught. Only thus can adequate measures be taken in advance which will serve to prevent, or at least minimize, the recurrence of these troubles which tend to keep the prospect of a successful conclusion in a precarious balance. If this book serves no other purpose, it should provide much food for thought for national and international planners.

The book was written, understandably, and as Sir John explains, primarily for British readers. However, the close collaboration, as it grew and developed, between the forces of Britain and those of the United States, became such that any account of that great accomplishment must relate something of the interwoven efforts which produced the final victory in World War II. Particularly the chapters relating to the ABC conversations and the Casablanca conference merit close reading. Despite the outside character of the book, one could have wished that more had been recorded of the combined planning in Washington and London during the months before Pearl Harbor.

Marshal Slessor's long and illustrious life of service spanned practically the entire period of the development of aviation and air power. Familiar to Americans and certainly to American military men is the parallelism in Britain and the United States of the struggle for recognition of the place of aviation in modern life and certainly in the armed forces. Familiar also is the perennial debate between the offensive and the defensive, and in the air forces, between bombers for attack and interceptors for defense. Certainly the Battle of Britain could never have been won had not the advocates of the interceptor had their say.

The author recounts from his personal experience the long and complicated high-level debates and discussions, in London and in Washington, unilateral and combined, over such basic problems as the decision to concentrate on the defeat of Germany and Italy first, and Japan afterward; night bombing of areas against daylight pinpoint bombing of specific targets; and invasion of the European continent in 1942-43 to establish the Soviet-demanded second front, in contrast to a preliminary end run in Africa, and attack of the "soft underbelly of Europe." We are reminded of the more direct and immediate American purpose of winning the war and going home, as opposed to the longer-range British political objective of being where you want to be after the war is won: the Balkans, Middle East, Vienna and Berlin. We have again brought to mind the too-often forgotten dark days after the fall of France, when England stood alone—the indomitable stand of "blood and toil, tears and sweat." It is, in truth, something for one, as the author was, to have been so closely associated with great leaders like Roosevelt, Churchill, Marshall, Dill, Eisenhower, Trenchard, Arnold, Portal, Hopkins, and Spaatz (who provides the foreword to this book). The American military reader will find some familiarity in the internecine clashes with Alan Brooke and Ernie King. Not so stimulating are the necessary accounts of the continuing problems of the allocations of aircraft production, though these are the very sinews of air warfare. The soldier may, with justification, challenge the concept of air control of land areas—even where primitive peoples and underdeveloped areas are involved.

One cannot help realizing how magnificently a physical handicap was overcome, and in comparing this to another similar case of a great leader on our side of the ocean who also succeeded in so doing. (I am sure the author won't thank me for this comment, but to many Americans he was and is "a great guy.")

Mention should also be made of the excellent index and glossary of code names and unfamiliar terms.

Finally, one wonders if the era of manned air power, spanned by this volume, is to be succeeded by a new era of ballistic missiles.

Reshaping Men's Minds

BATTLE FOR THE MIND
By William Sargent
Doubleday & Company, 1957
263 Pages; Illustrated; Index; $4.50

Reviewed by

DR. ROBERT N. WALKER, *Ph.D., who is Adjunct Professor at The American University, and a consultant to the Office of Special (formerly Psychological) Warfare.*

Battle for the Mind is an authoritative book describing the physiological mechanisms involved in the fixing or destroying of religious or political belief in the human brain. The author, a British physician-psychiatrist, has incorporated British, American and Russian physiological and clinical research in his book; he is eminently qualified to bring together the thinking of many authorities in this field.

Some fifteen years ago Dr. Sargent became interested in the similarity of the methods which have been used during recorded history by the political, religious and psychiatric disciplines to effect the most rapid and permanent changes in man's beliefs. Today, because of the ideological struggle between the free and slave worlds, and the choice which confronts mankind in its headlong race between education and disaster, the enormity of the stakes involved in the successful control of men's minds is impossible to overemphasize.

Since the Revolution, neurophysiological research has been pursued with great intensity and success in the Soviet Union. Nobel Prize winner I. P. Pavlov is responsible for the Russians' perfection of methods now popularly referred to as brainwashing or thought control. These methods have seized the imagination of many Americans who are in need of Dr. Sargent's nontechnical exposé of Pavlov's research in understanding the causal factors of combat exhaustion and mental illness in both mild (neurotic) and severe (psychotic) forms among both civilian and military personnel under stress conditions. The author touches on narcosynthesis and hypnosis in psychotherapy.

How may the patterns of belief and behavior which have painstakingly been built up over the years be nullified and a new (and often diametric) character and personality organization be instilled in rational, normal individuals (the more normal the subject, the easier is the process)? This Dr. Sargent attempts to clarify as follows:

"Find a point in a man's life about which he is worried or anxious. Bear down on this point as hard as you can. Inflame the fear or guilt with which he has invested it. Keep this up long enough and his brain will not be able to stand the stress. The function of the brain itself can also be disturbed by debilitation, varied physical shocks, and the like. A collapse of the nervous system follows, in which existing patterns of behavior and belief are dispersed. New patterns can be imposed while the subject is in the state of increased susceptibility which may follow the breakdown."

The author shows that the technique has been used all over the world by all kinds of people, and is used today by North Carolina's snake-handling cults, by the Chinese Communists in leadership training courses, and by the police of many nations.

As has been said, the purpose of the book is to explain possible physiological aspects of political and religious conversion. Photos showing rhythmic dancing (African tribal and British "Rock and Roll") and the fervor of snake-handlers in North Carolina, lend dramatic illustration to the author's thesis that emotionally charged, physically exhausting, and terrifying episodes of intense activity are conditions which tend to prepare converts for either God or the devil.

I found this book unusually interesting for the insight it gives to understanding individual mental and emotional processes, including conditioning and deconditioning of attitudes, sets and dispositions. It is a must for all who would try to understand the forces and methods in use today to effect mental changes and to win the most important battle of this or any prior time: the ideological battle for men's minds. Let us not forget Napoleon's dictum to the effect that one should never underrate an enemy. While the USA has ignored him, the USSR has almost deified Pavlov. Here are the facts about Pavlov's research and how the results of that research may affect you, the reader of this review, in both deeply personal and national collective impacts. You may be alarmed; certainly you will not be the same or passive after reading it.

The first comprehensive study of military education and national policy

Soldiers and Scholars

By JOHN W. MASLAND & LAURENCE I. RADWAY

The traditional distinction between military and political affairs in American life has become less significant as military officers increasingly participate in the formulation of national policies. The authors examine the impact of this change on professional military education. They present a forthright analysis of military responsibility today, the growth of education for policy roles, the form and content of that education, and its relation to the over-all duties of the armed forces.

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552 pages. $7.50

Pearl Harbor—Blow by Blow

DAY OF INFAMY
By Walter Lord
Henry Holt & Company
243 Pages; Illustrated; Index; $3.95

Reviewed by

JAMES C. V. D. BROWN, *a member of* ARMY's *editorial staff and a veteran of World War II service in Italy.*

Walter Lord has done it again. Using the same technique he applied to the SS *Titanic* disaster in his best-seller of last year, *A Night to Remember,* he has recreated the events of 7 December 1941 at Pearl Harbor and environs. He has made of these events a living document, seen through the eyes of those who were present. Here you will not find any indictment of those to blame, any detailed treatise on the whys and wherefores, any "where was everybody in Washington?" Here is only the story of what happened, at Pearl, at Hickam, at Shafter and at Kahuku Point. And on board the Japanese task force at sea.

This chronicle deals with the little people and their experiences; General Short and Admiral Kimmel receive only passing mention. You read about heroes, both service and civilian, about gutless wonders, about the weird and fanciful deeds performed in the stress of surprise attack. Meet the civilian dock-crane operator who sped his behemoth back and forth along its rails in an attempt to ward off planes from attacking the *Pennsylvania* and two destroyers immobilized in Drydock No. 1. Meet Beni Kanahali, native Hawaiian, who got mad when a Japanese pilot shot him in the leg, groin, and stomach, and ended the invasion of privately owned Niihau. Meet Ensign Kazuo Sakamaki, Imperial Japanese Navy, skipper of a two-man midget sub, whose role in the attack was fouled up from the start and ended ingloriously in his becoming our first prisoner of war. Meet the old CPO from West Virginia, a poor swimmer, who shouted that he couldn't swim another stroke, and then beat a would-be rescuer to the shore by five minutes.

As the primary target of the Japanese attack was the U. S. Navy, so this story is primarily Navy, but it is filled with stories of what the Army did. Here you may read of the guardhouse occupants at Hickam, released by a bomb which blew off the corner of the building, who rushed

out to man caliber .50 machine guns in fresh bomb craters, eliciting the comment from a tech sergeant that the "ones who are always in trouble are the ones you want with you when the going gets tough." The men who fired machine guns from the hip. Meet the "sergeant" from Schofield who took over and reorganized the 2d Battalion of the territorial National Guard. He was a wonder on supply, knew how to get everything. Tireless and ingenious, he stayed with the outfit an entire month. Then it was discovered he was a private, a prisoner from Schofield Barracks who had stolen a sergeant's uniform, a command car for transportation, and all the supplies he had come up with so miraculously for the territorial Guard.

In the course of relating all these on-the-spot experiences, Lord discloses the terrific impact of surprise. No one was expecting anything like this. The inertia was glacier-like. No one could believe it was actually happening. One sailor is quoted as saying, "I didn't even know they were sore at us." The great service machine in the Hawaiian Islands was crippled before it was able to find out what was happening to it. But, fortunately, ignorance and indecision were present on the other side. The Japanese task force was commanded by an officer who had had to be convinced of the mission's merit against his better judgment, was still doubtful of its merit after the combat reports were in, who decided not to follow up the first two waves of aerial attack but headed for home before the U. S. Navy's carriers turned up. The initial plan misfired and torpedo planes and dive bombers came in at the same time. But the attack was a tremendous success.

All this boils down to a vital record of bravery, cowardice, desperation and death.

Hamilton the Soldier

ALEXANDER HAMILTON: Youth to Maturity, 1755-1788
By Broadus Mitchell
The Macmillan Company, 1957
675 Pages; Index; $8.75

Reviewed by

DR. FORREST C. POGUE, *who is Director of the George Catlett Marshall Research Center at VMI. He wrote* The Supreme Command, *a volume in the Army's official history of WWII.*

Most biographies of Hamilton have stressed his financial genius and political prowess more than his activities as a soldier in the American Revolution. In this copiously documented (more than 175 pages of notes based mainly on primary sources) and authoritative volume, Professor Mitchell has devoted nearly two hundred pages to Hamilton's military record.

Readers of *ARMY* will find especially interesting the account of a West Indies youth who, some four years after arriving in New York, was appointed, at the age of twenty-one (Mitchell accepts 1755 rather than 1757 as Hamilton's date of birth) to command the New York artillery company which Colonel Dupuy in his *Compact History of the United States Army* calls the present Army's "one living, full-time link with George Washington's Continental Army." In less than two years, after heavy fighting on Manhattan Island and participation in the withdrawal across New Jersey and into Pennsylvania, Hamilton was a lieutenant colonel and aide to General Washington.

The young officer's duties were to take him "to every theater of the war, 1776-1781, save to Champlain, the Carolinas and Georgia, and the Iroquois country of Sullivan's expedition." Not only was he to meet nearly every important military figure of the day, but he was to work closely with the Commander in Chief and future President and to come to the attention of his future father-in-law, General Philip Schuyler, whose position and connections were to aid Hamilton's later political career. His military assignment, notes Mitchell, "was his early, sudden, and protracted introduction to public life."

Despite his important position, Hamilton yearned for a field command. Some of his friends pressed his cause while others—La Fayette, Greene and Laurens—suggested his name for appointment as Adjutant General or as a special envoy to France. A breach with Washington, which the Commander in Chief tried to heal, gave Hamilton a chance to ask that he be relieved from his duties as aide. In his anger, he spoke lightly of Washington, a fact which some of his partisans later used in derogation of the General. Mitchell, who is careful not to hide Hamilton's faults, declares that his "self-esteem diminished his perception of Washington's greatness" and adds that Hamilton was "too capable, and not enough self-abrogating," to share the personal attachment the Commander in Chief's other aides felt for the General.

Hamilton managed to get his battalion in time to march south to Yorktown. As one of La Fayette's subordinates he led his men in an assault on one of Cornwallis's key redoubts and was the first to enter the British position. For him this was not just an attack. Instead, as Mitchell notes, his "public life may be said to have commenced with his brilliant exploit in the siege of Yorktown."

The concluding portion of the book presents Hamilton's political ideas, his powerful defense of the Constitution in the *Federalist* papers, and his share in getting New York to ratify the document. Professor Mitchell's exhaustive treatment of every phase of his subject's early career recalls Freeman's *George Washington*. If the second volume, scheduled for early publication, is done in the same comprehensive and impartial manner as the first, it will certainly displace previous lives of Hamilton and rank high among important American biographies published in recent years.

Japan's Naval War

DEATH OF A NAVY
By Capt. Andrieu d'Albas
Devin-Adair Company, 1957
362 Pages; Illustrated; Index; $5.50

Reviewed by

DR. FORREST C. POGUE

Fanaticism, courage and blindness to the realities of modern warfare are the themes of Captain d'Albas's fast-moving summary of the destruction of the naval power of the Land of the Rising Sun in World War II. In this book, published in Paris in 1954, the author surveys the naval war in the Pacific from the proud boasts of the men who blasted the U. S. fleet at Pearl Harbor to the suicidal gestures of the young flyers who died in the Kamikaze attacks in the final days of the war.

Captain d'Albas, student of Japanese and husband of the daughter of a Japanese admiral, presents eloquently the Japanese story without reflecting unfavorably on the American enemy. He is credited with first-hand knowledge of Japanese records and documents and numerous interviews with naval leaders of Japan, but the printed bibliography is very sparse. It lists seven Japanese books and four American sources (Admiral Morison's volumes, "Commandant" Pineau's articles in *U. S. Naval Institute Proceedings*, Field's *Battle of Leyte Gulf*, and Karig's *Battle Report*), and there are no bibliographical citations in the text. His book, while interesting for its treatment of Japanese temperament and psychology, deals with the subject so completely from a Japanese approach that little attention is given to the American "side of the hill." An interesting example of this one-sided orientation is the fact that Admiral Halsey's name is not mentioned in connection with the fighting off Leyte.

Some of the book's lack of balance is corrected by Rear Admiral Robert A. Theobald's summaries, footnotes and transitional statements. Theobald, who commanded Destroyers, Pacific Fleet, and the Northern Pacific Force during the war, writes with a scholarly detachment which was sorely lacking in his book on Pearl Harbor. The Admiral feels that d'Albas's book "is an achievement of the first order."

The author believes that the naval leaders of Japan did not want war but fought determinedly once the decision was made to attack. After the first quick victories, however, the Japanese failed to prepare for the maintenance of their merchant marine and for a shipbuilding program which would permit them to cope with the American fleet in the Pacific. In

the end they could only offer suicide as a contribution to the Emperor's cause.

The fanatical courage of the Japanese officers and men is often described throughout the book. But Admiral Theobald declares of this realistically: "The tradition of the sea that the captain must be the last man to leave a sinking ship is sound. But to stay when all is lost and there is nothing more that can possibly be done is merely a waste of good officer material."

The Japanese, we find, suffered from interservice and intraservice rivalries. They were also hampered by fuel shortages, overextended supply lines, insufficient resources, and lack of realistic planning. But Captain d'Albas fails to emphasize sufficiently that the real killer of the Japanese Navy was the tremendous force of the United States Navy roused to murderous fury by the attack at Pearl Harbor and the early Japanese victories in the Pacific.

Picture of the Dreyfus Affair

AN INTIMATE JOURNAL OF THE DREYFUS CASE
By Maurice Paléologue
Criterion Books, 1957
319 Pages; Index; $4.50

Reviewed by
MAJ. GEN. H. W. BLAKELEY

Maurice Paléologue died in 1944. He was one of the leading diplomats and authors of France. In the former role, he represented the Ministry of Foreign Affairs during various judicial reviews of the Dreyfus case. He kept a diary of his part in the affair and sold it, after considerable literary retouching, to a publisher, with the restriction that it was not to be published until four years after his death.

This English translation is the third book on the Dreyfus case to be published in America in the last three years—a rather surprising record considering that it has been over fifty years since France was divided into two enraged camps over the question of the guilt or innocence of the Army captain. As an over-all picture of the Dreyfus affair the current book is not comparable to Guy Chapman's scholarly *The Dreyfus Case* [*ARMY*, March 1956], but it is, as the title indicates, an intimate one which throws new light on some of the characters and on French governmental, military, and legal procedures. The American reader will be inclined to agree, although M. Paléologue did not, with some of the comments of a visitor, the Lord Chief Justice of England, who was "shocked" and talked about "an offense against justice" after attending part of the second court-martial.

For the military reader who is professionally concerned with current events in France, this is a background book of some value.

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By Lt. Col. Paul M. A. Linebarger, USAR

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